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by Jean M. Favors



MICRO ADVENTURE™

#4

**TIME
TRAP**

by

Jean M. Favors

Programming by Susan M. Zakar

A Parachute Press Book



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4 5 6 7 8 9/8

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01

Warning: The following information is crucial to the success of your mission. Read it carefully. It may save your life.

As a certified member of ACT (the Adventure Connection Team), your job, as always, is to defend the cause of good against evil. It won't be easy, because BRUTE (the Bureau of Random Unlawful Terror and Evil — an international organization bent on wreaking havoc throughout the world) will be fighting you every step of the way. Your computer expertise will be vital to this mission. So turn on your home system. Throughout this adventure you'll be called upon to program it to get the ACT team out of some really tough spots.

Look for the box chart next to the program instructions. It will tell you which micros will run each program. If the program won't run as is on your computer, consult the Reference Manual in the back of the book — fast! Good luck. This message will be erased from memory in 30 seconds.

CHAPTER

1

Mission Day 01 Algebra Class 10:45 A.M.

Your palms are sweaty. Your throat feels as if it's stuffed with a cotton ball. In exactly 15 minutes, you will face almost certain doom — a midterm exam in American history. The dates you studied last night mush together like soggy cornflakes, and your mind tells you that the only Paul Revere you know is lead guitarist for a sixties rock group.

Your eyes search the gray sky outside for help, but all you see is a window washer. He stares at you as he wipes the pane with his squeegee. As if you didn't have enough trouble, Mr. Bumbridge, your regular math teacher, is out with the flu. The substitute (a woman with the charm of a rattlesnake) has just zapped the class with 12 pages of homework. Without warning, she suddenly appears beside your desk.

“This will stop your daydreaming,” she says sternly, handing you a sheet of paper with lots of word problems on it. Her voice makes you think of an iceberg.

“More homework?” you groan.

“No. You must begin this at once,” she instructs you. Then, lowering her tone to a whisper, she adds, “Use your computer. There are 17 problems here.”

You feel the blood rush from your face. How could she possibly know about the miniature terminal hidden inside your duffel bag?

You squirm in your seat, eyeing the teacher warily as she stalks over to Cary Carmichael and pulls the earplug of his transistor radio. Is it possible that she’s a member of ACT? The thought makes your fingers shake with excitement. If so, the strange jumble of symbols on the page in front of you could be an encoded message from headquarters. And 17 must be the secret number. You quickly enter the decoder program, and the message.

**KWLM ZML VIBQWVIT MUMZOMVKG.
JZCBM AKQMBQAB WV BPM TWWAM.
EQBP BQUM UIKPQVM IVL VCKTMIZ
LMDQKM.
PQA WJRMKBQDM QA BW KPIVOM BPM
WCBKWUM WN BPM IUMZQKIV
ZMDWTCBQWV.**

Type the following program into your computer. Run it and enter the secret number

when asked. Then enter the coded message. Lines 20, 50, 60, 130, and 170 must each be typed as one line on your computer.

PROGRAM 1

```
10 REM DECODER
20 PRINT "WHAT IS THE SECRET
   NUMBER? ";
30 INPUT B
40 PRINT
50 PRINT "TYPE 'STOP' WHEN ASKED
   FOR"
60 PRINT "SECRET MESSAGE TO END
   PROGRAM."
70 PRINT
80 PRINT "SECRET MESSAGE->";
90 INPUT B$
100 IF B$ = "STOP" THEN 220
110 FOR I = 1 TO LEN(B$)
120 A = ASC(MID$(B$,I,1))
130 IF ((A >= ASC("A")) * (A <= ASC("Z")))
   THEN 160
140 C$ = CHR$(A)
150 GOTO 180
160 A = ASC(MID$(B$,I,1)) - ASC("A") + 1
170 C$ = CHR$((A + B) - INT((A + B) / 26)
   * 26 + ASC("A"))
180 PRINT C$;
190 NEXT I
200 PRINT
210 GOTO 80
```

220 PRINT "*END OF DECODING***"**
230 END

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	99/4A	400/800
✓	✓	✓	✓	✓	✓	✓		

This program will run on all personal computers in the chart above. See the Reference Manual, page 117, for changes for TI and Atari.

Your eyes widen as you read the message. You hardly notice that the bell is ringing and all the other students are filing out of the room. BRUTE's shady schemes to create chaos in the present are bad enough. They can't be allowed to tamper with the past!

A trip through the pages of history — your stomach does jumping jacks at the prospect. Considering your weak grasp of the subject, you won't be any help at all.

A sharp tap on the window derails your gloomy train of thought. The man outside is signaling you. *This is it*, you tell yourself, knowing that he must have been sent to take you to headquarters. You're not the least bit surprised at this unexpected summons, be-

cause by now you're used to ACT's unusual methods of transportation. *This time it's probably a helicopter*, you decide. That's the only way the man could be dangling outside the third floor of the old school building waiting for you. Quietly you walk over and raise the window.

The man looks familiar. Even with the cap and stubbly red beard, you recognize him as a driver who's picked you up before.

"Hi, Hot Wheels," you say.

"How's it going, Orion? Why don't you call me H.W.? We've been through a lot together," he says in a friendly tone. Then more urgently he adds, "Move it or lose it — we don't have much time."

You climb out onto a scaffolding that's not like any you've ever seen. Instead of being anchored to the roof with ropes, the thin board you rest your bottom on is attached to a hot air balloon. The nylon fabric of the globe is camouflaged to blend in with the cloudy sky.

"Fasten the safety straps and put on this hard hat. There's a storm coming up — this might be a rough ride," H.W. warns.

You settle yourself firmly. As the bizarre craft drifts away from the side of the school, the wind picks up. It cuts through your jacket as if it were made of Kleenex instead of corduroy. "This is sure a weird way to get to Tuttle Air Force Base," you say. Your teeth are chattering so hard that the words are chopped up before they come out.

“Not going to Tuttle this time,” your companion replies tersely. “We’re headed for an installation that’s so top secret even the agency director forgets where it is. It’s up in the mountains — the only way you can get there is by ‘copter or balloon.”

“So why did you choose balloon?” you ask, worried by the sagging look of the gas-bag.

“Just one of those important decisions the Acting Director of Transport has to make,” he says, puffing out his chest. “I’ve been promoted since the last time I saw you — at least temporarily. If I do well on this mission, the job is mine for keeps.”

You open your mouth to congratulate him, but he cuts you short. “Listen. I’m supposed to fill you in on some of the details of this mission,” he says urgently.

“This is a real biggie. Caesar is handling this one personally,” he reports in an awed tone.

“Who’s Caesar?” you ask.

He stares at you blankly for a moment before saying, “He’s A-Number-One — the top banana — the kingpin! Sorry, I forgot you wouldn’t know his code name. Agents hardly ever get to meet him.”

“You mean the Director of the Agency?” You let out a long whistle. The man is a legend — he never goes on missions because he’s too important to risk. You’re definitely

impressed. "What's so special about this mission?"

"Like I said, this is a big one. Caesar doesn't want any foul-ups," he says. "A crazy scientist named Bartholemew Bacle invented a time machine for BRUTE. The creeps were going to use it to fix up the future — do things like rigging elections, you know. But after it was finished, Bacle stole it and ran. He wants to go back and help the British win the Revolutionary War."

You are confused. "Why would Bacle want to change history?" you ask.

"Beats me." H.W. shrugs. "Anyway, BRUTE caught him and stashed him away on a funny farm in Minnesota, but he escaped."

You're about to ask how ACT got involved, but just then you glance up. "Is the balloon supposed to sag that way?" you ask.

From the worried frown that creases H.W.'s forehead, you guess that it's not.

"Somebody may have been messing with the mechanism — that sucker's losing heat a mile a minute," he says between clenched teeth. "I told the ground crew to put a special guard on all the transport vehicles. . . ."

In the middle of his long speech about idiots who can't follow orders, you get restless. The balloon is getting smaller, and to make things worse, the storm that has threatened ever since you got on board is coming closer. Lightning licks the edges of the heavy clouds.

“Can you pump in more heat?” you interrupt.

“We’re out of propane. But don’t worry. A simple call to the base and help will be here in no time flat,” he assures you, opening a shiny black lunchbox that is resting on the seat beside him.

This is a great time for a snack, you tell yourself as he digs out a couple of tuna sandwiches. But you’ve forgotten that with ACT, things are seldom what they seem to be. A flick of his wrist and an antenna appears. The ordinary lunch pail turns into a CB radio.

“That’s neat.” You let out the breath you’ve been holding. But your stiff shoulders have barely begun to relax when another disaster strikes. Drawn by the slender metal rod, a vivid bolt of lightning hurls itself through the air and zaps the radio into a smoldering ruin. You are singed by the heat, and the smell of burnt Twinkies makes you gasp.

“What do we do now, Orion?” Hot Wheels asks, as though you’re an aeronautical engineer instead of a computer expert.

Your mind races to meet the challenge. “Throw over everything that isn’t tied down,” you reply. You take a nervous look at the river that is churning wildly below you. “That might give us enough altitude to get us past the water before we have to land.” At the moment you can’t decide which is worse — being skewered by the wickedly sharp rocks sticking up

out of the wind-whipped waves or being smashed into a pancake against the craggy cliffs on the other side.

Hot Wheels reaches for your duffel bag, but you protest, "Hey, wait a minute! Get rid of the buckets first — I need all the stuff in there." You don't want to lose your new computer — and if you do survive this current mess, you'll certainly need the notes you made last night on the Revolutionary War.

He ignores you, and your belongings go overboard. Then one by one, pails, rags, and squeegees follow the duffel bag's path out into space. Your brainstorm may have saved the day. The balloon's descent is slowing, but not nearly as much as you'd like it to. Desperately you strip off your shoes and jacket and motion for Hot Wheels to do the same. Relief surges through you as the wind lifts the craft higher. With a little help from the elements, you may make it after all.

The craft seems to be stabilizing. "Finish telling me about the mission, H.W.," you say, as much to take your mind off your predicament as to gather new information.

"I don't know too much more," he replies. "Except that a BRUTE operative was nabbed last night trying to break into headquarters. He was going to steal ACT's time machine — "

"I didn't know we had one," you interrupt. "Why has it been kept a secret?"

“It was a spinoff of experiments on Einstein’s theory. After it was completed Caesar vowed never to use it — it’s much too dangerous to go traipsing around in time, you know.” Hot Wheels shudders at the thought. “But now we don’t have any choice. ACT has decided to help BRUTE recapture Bartholemew Bacle before he can blow up the Colonial army with a nuclear bomb he took with him. Trouble is, we have no idea where or when the nut intends to strike — could be anywhere or any *time*.” He looks at you curiously. “You and that computer of yours ought to be able to give us a clue — right?”

Before you have to admit that you don’t know beans about battles in the past, the chilly wind becomes a pair of giant hands tossing the balloon back and forth in a terrifying game of catch. The vessel is snagged on the fingers of a downdraft, and you find yourself speeding toward a bunch of trees. The topmost branches of a pine tree scrape against your legs. Not wanting to see the end, you close your eyes and take a deep breath.

“So long, world,” you whisper.

CHAPTER

2

Mission Day 01 ACT Top Secret Installation 11:14 A.M.

The bone-shattering impact you expect never comes. Instead, the scaffolding skims the treetops and plunges into a pile of something that feels like a cross between popcorn and foam rubber. Your toes wiggle against a plastic sheet stretched under the bottom.

“What in the name of. . . !” you cry when you can finally pry open your eyelids. You are in a huge wading pool filled with spongy bits of white fluff.

“ACT’s latest lifesaving invention, the marshmallow trampoline,” Hot Wheels replies. “It has an automatic positioning device that moves it under the path of any falling object. What I can’t figure out, though, is how headquarters knew we were in trouble.”

It's your turn to supply the information. "My computer has a signal that goes off whenever it gets more than 15 feet away from my body. When you threw the duffel bag over, it must've alerted a tracking system."

There's no time for more conversation, because the last of the heat is escaping from the balloon. If you don't move fast you will be buried in its nylon folds.

You scramble over the side of the trampoline just as a small helicopter appears and hovers over the clearing. A bright red ACT insignia decorates the door of the craft. You follow Hot Wheels to the harness dangling from the vehicle. It isn't until you're inside that you realize how scared you've been and how cold you are.

"Who else is on the team, H.W.?" you ask, trying to control a shiver.

"You and me and Caesar, for sure. I don't know the others. The time machine holds five, and I guess we'll have a full load." He rubs his hand over the red beard on his chin and muses out loud, "Wait till you see that time machine. She sure is a trim little craft — not at all like that hunk of junk of Bacle's."

"Oh, yeah? What's the difference?"

"Ours is superior, of course. It's larger, and it moves through both time *and* space. BRUTE's is a one-seater, and it has to be in the exact location you want to get back to."

Before he can get wound up, the 'copter

sets down on the launch pad in front of a windowless, concrete building set into the side of a mountain. You are quickly hustled through the heavily guarded door and into a small conference room.

The scene inside is total chaos. Everyone is talking at once and a tall, thin man who looks rumpled and sleepy is trying to restore order. You assume that he is Caesar.

There's also a somewhat familiar-looking silver-haired man seated at the long table. He doesn't seem the least bit ruffled by the confusion. An aloof smile plays around the corners of his mouth and he studies the nails of his left hand. You do a double take when it hits you that he is none other than Nathaniel Peckinpaw, playboy member of the jet set, ruthless financier, and one of the richest men in the world. What's he doing here?

But your curiosity about ACT's commander-in-chief makes you shelve your mental questions for the moment. Caesar certainly doesn't *look* like a big shot. His thinning hair and the small laugh wrinkles around his brown eyes remind you of your family's dentist.

He nods in your direction. "Too bad about the little glitch in your transport, Orion, but no harm done."

The ACT leader introduces you to Bevatron, a slender black woman with a mischievous gleam in her dark eyes. She is the demolitions expert who will be in charge of defusing

the bomb once its place in time is located. She is also (thank goodness) a Revolutionary War buff.

“You’re being terribly rude — shouldn’t you present the guest of honor first?” Peckinpaw sneers sarcastically. “But then, you do-gooders seldom have any manners.”

Caesar ignores the barb. “You hardly need an introduction since your picture is plastered all over the newspapers every day. But I will reveal one thing the world doesn’t know.” He turns to the team with a tight smile. “Mr. Peckinpaw is our arch adversary. Folks, say hello to the director of BRUTE!”

The announcement is greeted with stunned silence.

“No applause, please,” the man remarks with a sarcastic tip of his head. Not a strand of his carefully combed hair moves.

Caesar frowns at Peckinpaw. “Let’s get things straight from the beginning. We have to work together on this mission. I don’t like it. You don’t like it. But that’s the way it is. So cut the sarcasm and stick to business!”

The BRUTE director leans forward in his chair, all trace of humor gone from his eyes. He looks like a cobra about to strike.

“Now listen here,” he says slowly. “None of you cloud-headed clones could possibly spot Bartholemew Bacle — he’s a master of disguise. I alone hold the key to his identity. So that makes me essential to your mission.”

"I can't believe it," Bevatron says, shaking her head. "This means that ACT and BRUTE will be working together!"

"Be sure of one thing, though," Peckinpaw announces. "Once this matter is disposed of, it's back to business as usual!"

"All this drivel's not getting the job done," Caesar growls. "If we can't stop Bacle, the marching band will be playing 'God Save the Queen' at the next Super Bowl. Now give me some answers, group. Where do you think he's taken the time machine?"

"Bunker Hill."

"Lexington."

"The Old North Church."

There are three history experts in the room, and they all speak at once. Wishing you'd paid more attention to Mrs. Green's fourth-period history lectures, you stay out of the argument.

"Hold it," the head of ACT shouts. "The trouble is we have more data than we can digest. Orion, can your computer help us out here?"

Your mouth goes as dry as the Sahara and you feel a ton of bricks settle in the pit of your stomach. Desperately, you snatch at an idea that has been playing around the edges of your mind. "What was Bacle wearing when he escaped from the sanitarium?" you ask.

"What's that got to do with it?" Peckinpaw snarls. "This is serious business. Who let that kid in here?"

Before you can defend yourself, Caesar slams his fist down on the table — hard! Even the BRUTE director is startled. “That kid, as you put it, is one of our crackerjack computer experts. Now answer the question!”

You can see that Peckinpaw is not pleased. He pins you to your seat with a cold stare. “Bacle had on a hospital gown, of course. We took the precaution of removing all his personal belongings. So what?”

“Was he alone?” You’re still uncertain of your path, but it’s getting clearer.

Peckinpaw looks as if he’s about to argue again, but a glare from Caesar seems to change his mind. “Bacle convinced one of the hospital attendants to help him — he was waiting in a van. The components for the time machine and nuclear bomb were hidden under some painting equipment in the back. We nabbed the driver, but while we were busy interrogating him, Bacle jumped in the vehicle and drove away.”

You are almost there. “Did he have access to a bank account or credit card?”

“We confiscated his checkbook, but the hospital attendant gave him a BRUTE corporate credit card.”

Bingo! Jackpot! Four aces!

You smile triumphantly. “I know exactly how we can locate Bacle,” you say quietly.

CHAPTER

3

“How?”

The word comes at you from all sides.

“Simple. Bacle started from the hospital in Minnesota. His time machine needs to be placed in the exact geographic location where he wants it to emerge in the past, so he has to transport it to where the Revolutionary War took place,” you explain.

“Since he has no money, he has to use the credit card to buy clothes, food, and gas for the van. The credit card company will have a record of his purchases. If we can access their files to follow the trail of receipts, we’ll know where he’s going,” you finish.

“Good work, Orion!” Caesar cheers.

A gleam of grudging respect flits into Peckinpaw’s eyes. “Access to the records is no problem — BRUTE owns the credit card

company. One phone call from me will get you all the data you need," he offers.

The ACT Equipment Section provides a terminal and you prepare for input. In a matter of moments, Bacle's credit card purchases appear on your monitor. Each receipt has a transaction code. The codes will tell you where he's been and, if you're lucky, where he's going!

The codes are: 101, 103, 102, 404, 401, 402, 403, 304, 302.

Type the following program into your computer. Run it and enter the transaction codes. Lines 30, 40, 50, 60, and 70 must each be typed as one line on your computer.

PROGRAM 2

```
10 REM TRACER
20 K = 0
30 DATA "NORTH", "SOUTH", "EAST",
  "MIDWEST"
40 DATA "MINNEAPOLIS", "DETROIT",
  "BISMARCK", "JUNEAU"
50 DATA "LOS ANGELES", "ATLANTA",
  "DALLAS", "TAMPA"
60 DATA "WASHINGTON", "HEISTAND",
  "RICHMOND", "PITTSBURGH"
70 DATA "COLUMBUS", "CLEVELAND",
  "WHEELING", "CHICAGO"
```

```

80 RESTORE
90 PRINT "ENTER 0 TO END."
100 PRINT
110 PRINT "ENTER TRANSACTION CODE->";
120 INPUT N
130 IF N = 0 THEN 360
140 K = K + 1
150 R = INT(N / 100)
160 C = N - R * 100
170 FOR I = 1 TO 4
180 READ R$
190 IF I < > R THEN 210
200 A$ = R$
210 NEXT I
220 X = R * 4 - 4 + C
230 FOR I = 1 TO 16
240 READ C$
250 IF I < > X THEN 270
260 B$ = C$
270 NEXT I
280 PRINT "- - - - -"
290 PRINT "* STOP # ";K;" *"
300 PRINT A$; "ERN AREA"
310 PRINT "CITY: ";B$
320 PRINT "- - - - -"
330 PRINT
340 PRINT
350 GOTO 80
360 END

```

This program will run on all the personal computers in the chart on page 21. See the

Reference Manual, page 118, for changes for Atari.

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	99/4A	400/800
✓	✓	✓	✓	✓	✓	✓	✓	

Bevatron plots the trail you give her on a large map of the United States. As she places the last pin on Heistand, Pennsylvania, she draws in a sharp breath. "There's no doubt about it, Bacle's headed for Valley Forge." She turns to the team, her face filled with apprehension. "The Continental army was quartered there during the winter of 1777-78. If we can't stop him from detonating that bomb, George Washington and the heart of his forces will be wiped out! It's one sure way to change the outcome of the war."

"That's it. Let's get cracking!" the ACT director barks.

Something is troubling you. You clear your throat hesitantly. "Excuse me, sir, but knowing where is not enough — we've got to pinpoint when. If we don't have the date he plans to hit Valley Forge, we could mush around until the spring thaw and never find him!"

"Not to worry, my young friend. Bacle

will blow his bomb on December 31, 1777.” Peckinpaw chuckles evilly. “You see, he had an ancestor back there who bet on the wrong horse. My great-great-grandfather, that super-patriot Jeremiah Peckinpaw, exposed Barnaby Bacle for the Tory traitor he was.”

“This is no time for great-grandstanding, Peckinpaw. Get to the point,” Caesar demands, amused by his own pun.

“Barnaby Bacle led a band of Tories. He’d planned to dress them as a troop of British soldiers and raid the Colonial camp on the night in question. My ancestor discovered the plot, informed General Washington, and thus averted the tragedy.” The man quirks his eyebrows smugly. “The Bacle family never got over the disgrace. That’s how I first met Bacle. He found me, to try and make me pay for what happened to his ancestor. I convinced him to take his revenge on the world by joining BRUTE. Perhaps I convinced him too well.”

Before the BRUTE director can finish his theory, he is hustled along with the rest of you into the Special Effects Section. Caesar puts on a shabby black coat and homespun breeches. He wears a sandy wig gathered into a pigtail at the nape of his neck. Bevatron is to play the part of a male slave out to gain freedom by fighting with the patriots.

You had visions of slipping on a spiffy blue uniform with shiny brass buttons, so you

are dismayed by the fringed hunting shirt and rough pants you are given. "I thought we'd be disguised as soldiers," you grumble.

"You are. That getup marks you as a 'buckskin' — back then, that's what they called people from Virginia," Bevatron tells you as she pulls a cap over her short, curly hair. In her shapeless, tattered clothes, she looks like a teenage boy. "Uniforms weren't standard until 1779. Most soldiers in the Continental army wore whatever they could scrape together. Didn't you learn that in your history class?"

"I forgot," you mumble, trying to decide what to do with a package of grape sour balls you retrieved from your pocket. You make yourself very busy with the new terminal you've been given. No one would guess that your battered canteen is state-of-the-art hardware. You tuck the candy into a pouch on the outside of the canteen's canvas cover. Who knows? You might get hungry tramping around in the cold and snow.

You barely have time to look at the outside of the time machine, but you are definitely disappointed when you climb in. Science fiction has prepared you for a dazzling array of dials and gadgets. What you find in the small interior is five seats (designed for midgets, it seems) surrounding a central control pedestal. The guidance system is smaller than a typewriter keyboard, and the six-inch monitor guarantees a severe case of eyestrain.

“Are you sure you know how to operate this thing?” Peckinpaw queries.

“I can drive anything that moves,” the Acting Director of Transport boasts. He lowers the solid outside shield of the vehicle.

You expect a bump, a lurch — any kind of motion at all. But except for the constant interplay of red and green lights on the control panel, nothing happens. “When do we start, H.W.?” you ask.

He scratches his chin thoughtfully. “As soon as you program the computer guidance system, Ace.”

You can hardly believe your ears. You call for a listing of the guidance program.

Type the following program into your computer. Then run it. Enter the year you want to travel to, the place (use capital letters), and the speed factor. The speed factor can be any number between 1 and 50 — 1 is the fastest. Set the jump-span factor at 1. If you can, save this program. You'll need it again.

PROGRAM 3

```
10 REM TIMEJUMP  
20 W = 40  
30 PRINT "ENTER YEAR TO GO BACK TO:";  
40 INPUT D  
50 PRINT "ENTER PLACE:";  
60 INPUT P$  
70 PRINT "ENTER THIS YEAR";
```

```

80 INPUT Y
90 PRINT "ENTER SPEED FACTOR";
100 INPUT S
110 PRINT
120 PRINT "ENTER JUMP-SPAN FACTOR"
130 PRINT "FROM MACHINE CONTROL:";
140 INPUT M
150 W = W - 6
160 Z = W - LEN(P$) - 2
170 T = -1
180 IF Y < D THEN T = 1
190 FOR I = Y TO D STEP M * T
200 J = ABS(I / M) - INT(ABS(I / M) / Z) * Z
210 FOR K = 1 TO J
220 PRINT " ";
230 NEXT K
240 PRINT I;"->";P$
250 FOR K = 1 TO S
260 NEXT K
270 NEXT I
280 PRINT
290 PRINT "...AT ";P$;" IN ";D
300 END

```

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	99/4A	400/800
✓	✓	✓	✓		✓			

This program will run on all the computers checked in the chart on page 25. See the Reference Manual, page 120, for changes for VIC-20, TI, Atari, and Radio Shack Color.

“Okay, we’re rolling,” H.W. says as you watch the years speed by on the monitor.

After what seems like a century, the monitor reads VALLEY FORGE 1777 — but the ship is still moving! You can feel it!

Peckinpaw starts to say something, when he suddenly lets out a startled yelp! Snatching the sleeve of his shirt back, he rips off an expensive-looking watch. You see a small curl of smoke coming from its face.

Caesar grins. “See what happens when you don’t follow instructions? You were told to leave your personal belongings behind. That goes for that ring you’re wearing, too.”

You squirm guiltily, thinking of the sour balls, but it’s too late to get rid of them now.

The BRUTE director glares at Caesar. “Where I go, this ring goes too — it’s the Peckinpaw crest.”

“Well, at least put it away where it won’t be noticed,” Caesar says shortly.

Ignoring the order, Peckinpaw shakes his watch. “Why would it self-destruct?”

“The hands were going counterclockwise at the rate of ten years per second,” Bevatron replies. “That much friction produces an awful lot of heat.”

“Science fiction!” says Peckinpaw archly, as he flips the watch away in disgust.

The watch arcs toward the amber light in the center of the control board, the one marked ENERGY SOURCE — DO NOT DISTURB. It hits head-on, then bounces onto the numeric pad of the keyboard.

Suddenly, the vehicle bucks like a frightened bronco! Before this the ship seemed to be slowing down, but now you can feel it picking up speed.

“Watch it,” Hot Wheels growls as he struggles with the controls.

The time machine finally rights itself. All movement stops, but you don’t like the way that yellow light is flickering.

“Everything okay, H.W.?” Your voice is steady, but butterflies are holding a meeting in the pit of your stomach.

“I think I got her back on course, but I can’t be sure.” Hot Wheels’ face looks gray. “We seem to be going back much faster than before, though. I can’t figure out why.”

“You’re doing your best. We’ll just have to wait and see what happens next.” Caesar flashes the driver a strained smile.

Ten minutes — 20 minutes — 40 minutes crawl by. You feel a drop of sweat creeping down your spine.

Just when you think the tension inside the ship is going to smother you, the twinkling lights on the panel go dark.

“This should be Valley Forge.” Hot Wheels breathes a sigh of relief as he pushes the button that lifts the outside shield.

The scene that greets you isn't like any part of Pennsylvania you've ever visited. The time machine is surrounded by strange ferns that tower over you. Above the cliff to the left of the craft, a bird wheels in lazy circles. Your eyes widen as you realize that its wingspan must be at least 30 feet!

“Can you give us a fix on our position, Hot Wheels?” Caesar's voice is urgent.

The driver taps a button on the console and a message flashes onto the screen in front of him. VALLEY FORGE, PENNSYLVANIA.

“It can't be Valley Forge,” Bevatron says. “Unless . . .” She doesn't get to finish her thought — and she doesn't have to.

A crashing noise to the right grabs your attention and answers your questions, for there, coming through the dense, steamy green of the ferns, is the most amazing animal you've ever seen. Its body is twice the size of an 18-wheeler, and its head is an overgrown pimple atop the long, arching neck.

“That's got to be a brontosaurus,” you gulp. “A dinosaur. . . . We're in the right place. . . . We're just in the wrong time!”

CHAPTER

4

The dinosaur's thick tail swishes within a few feet of the time machine as it wanders off toward the stream.

"It's a vegetarian, luckily," Bevatron assures you.

Caesar shakes his head worriedly. "We've got to get out of here. Orion, can you reprogram this thing for the correct destination?"

"I hope so." That's all the confidence you can find.

Nobody breathes as you make the calculations necessary to activate the time machine. As you work over the controls, you take another look at the brontosaurus. You wonder whether its bones are going to be wired together in some museum far ahead in the future. The thought makes you a little sad. But you've got work to do. Finally you feel you've done it. "Prepare for takeoff, H.W. We're now

set to land in Valley Forge, just to the west of the Continental army's camp, in 1777."

"Okay," H.W. says, flipping the switch.

Nothing happens. "I'm getting an error code," you tell the disappointed group.

"Maybe it's a mechanical problem," Caesar suggests.

You all climb out and start looking at the time machine as if it were a used car you were about to buy. That's when you realize you're not alone!

"Look over there!" You can barely talk, you're so frightened. "It's a tyrannosaurus!"

"They eat meat," Bevatron adds. But nobody needs to tell you that. The monster's jagged teeth are clearly visible. He's only 50 yards from the time machine when he stops and rears up to his full height — he's tall enough to see over a two-story house. His gigantic head swings from side to side as though he's sniffing the air.

"Think he sees us?" Bevatron shudders.

"Lord, I hope not. Those jaws look large enough to cram in this whole ship," Caesar replies grimly.

Then, as if the beast were listening, he bares his sharp, daggerlike teeth. There must be at least 500 of them jammed into those dripping red gums!

"Get us out of here — now!" Caesar commands as you all scramble into the ship.

Hot Wheels' shoulders sag. "It's no use. I've tried everything, but the system won't start. I don't think it's mechanical."

If you suspected you were in trouble before, you're 100 percent certain now, because the earth begins to shake. Cracks appear in the ground beside the stream. Earthquake! The huge lizard is crazed with fear! He runs one way, then another, roaring and slashing with his arms and tail. You watch in horror as the tail pulls down a huge branch of a tree.

"You're the only one who can save us, Orion. Get this thing out of here!" Caesar is practically shouting.

Suddenly, you see something you hadn't noticed before. "H.W., did you reset the jump-span factor control? It's reading 100,000 but I set the programming at 1!"

"I didn't touch it, Orion," H.W. says.

"I've got it! Peckinpaw's watch must have hit the control. It made us jump 100,000 years at a time instead of one year at a time. That's how we wound up here! Now all I have to do is rerun the program and enter the jump-span factor at 100,000 — and we should be able to go. What year are we in?"

"65,000,000 B.C."

"Okay, that's minus 65,000,000."

Hot Wheels gives you a grateful grin as he takes over the controls and starts her up.

If you have been able to save the pro-

gram, run it again. Change the jump-span factor and enter the year the time machine is in (-65,000,000). If you weren't able to save it, input it again. You'll find it on page 24. You may want to vary the speed.

The control lights are flashing so fast they're almost a blur. A glance at the screen tells you that the ship is traveling 10,000 times faster than it did before. At this rate, you'll be back to 1777 in —

You don't have time to finish the thought, because the screen flashes the message: *Four seconds to original destination. Warning — power low. Enough energy left for only one more trip.*

"I assume that's all we need," Peckinpaw observes dryly.

You step out of the time craft onto a patch of land in the center of a grove of winter-bare trees. The isolated spot is on the north slope of Mount Misery. It is part of Windy Bluff, land that is owned by the Peckinpaw family. Before the team left headquarters, the BRUTE director assured Caesar that it would be the best landing site.

Rapidly, the team sets up the camouflage for the time machine. Special Effects Branch has provided a plastic package no larger than a briefcase. When it's inflated, it looks exactly like a small toolshed. As you work, your eyes pick up details of the surroundings.

The clearing looks as though it's been deserted for years. Dry, thick brambles cover most of the ground, but at the edge of the trees, there is a stone building.

The sky is white. It looks and even smells as if it's going to snow. The wind tugs at your ragged coat. You shiver in spite of your 20th-century thermal underwear.

"Let's move out," Caesar says crisply when the craft is safely covered.

As you follow him through the dense underbrush, you are curious about the scuffed leather bag the expedition leader is carrying.

Suddenly you stop, cocking your head alertly to the side. Your ears pick up something more than the moan of the icy wind. "I think someone's coming," you say to the others in a low, urgent tone.

"Quick — down in the brush beside that stone wall," Caesar orders. "We can't take the chance of being captured before we get to the Patriots' camp."

As you flatten yourself against the ground, two riders come into view. The lead horse carries a chubby, middle-aged man with pockmarks on his face. He peers around anxiously as he reins in his mount.

When you get a good look at the second horseman, you have to clamp your hand over your mouth to keep from letting out a startled yelp — he could pass for Peckinpaw's twin! You can see a touch of creamy lace

sticking out of the collar of his buff-colored riding coat. His finely tailored brown pants are tucked into boots of polished calfskin. He is obviously the BRUTE director's great-great-grandfather.

You risk a quick peek at Nathaniel Peckinpaw, who is crouched beside you. His eyes are shining with family pride.

"Are you sure it's safe to talk here, Jeremiah?" The fat man's face is wrinkled with worry. "If we are overheard, we could wind up dangling at the end of a Patriot rope."

"You are a frightened rabbit, Barnaby Bacle. Windy Bluff is the most secure place in this colony. No one knows of the stronghold I'm building here — not even the British. My loyal guards from the Society of Brutus patrol Mount Misery around the clock."

"Shhhh!! Don't even mention the name of your unholy band of cutthroats to me. I don't want to think of the terrible deeds you do. Your schemes have spread chaos across the —"

"Sanctimonious fool! You've been willing enough to use the gold we have given you. Where would you timid Tories be without my backing?" Peckinpaw's ancestor sneers.

You can hardly believe your eyes and ears. Here, right in front of you, are Peckinpaw's great-great-grandfather and Bacle's great-great-grandfather — and they seem to be plotting together against the Patriots! You lean forward, wanting to catch every word.

Jeremiah shifts in his saddle. The movement makes his horse pull against the reins. "Whoa there, Lucifer. Settle down now. . . ." He stops and stares toward the fake farm building. "I never noticed that shed behind the smokehouse before." His eyes narrow to slits as he wheels the horse and starts slowly toward the hidden time machine.

You hold your breath and cross your fingers. Out of the corner of your eye you see Caesar raise his arm. With a quick, quiet motion, he tosses a small rock over to the other side of the clearing. The noise it makes as it lands in a pile of leaves causes both riders to turn around.

"Must have been a squirrel," Barnaby Bacle says after a few minutes. He wipes his forehead with a large blue bandanna and pleads, "Let us finish this ghastly business quickly, Jeremiah. You can make an inventory of your property later."

With a last suspicious look at the shed, Peckinpaw makes his way back to his jittery friend. "Is everything ready for tomorrow night?" he asks coldly. "The raid on the Colonial camp must be swift and deadly. I won't tolerate any mistakes."

"My men have been issued British uniforms and firearms. It will look as though a troop of King George's men did the deed," Bacle assures him. "But must we raid them at night? It seems so cowardly."

“We must strike when it will do the most damage,” Peckinpaw asserts. His face darkens. “All this wouldn’t be necessary if the king’s men would do their work. But no, they want to sit on their hindquarters in Philadelphia and wait until the weather is fairer! The one thing I can’t stand about the British is that they are so confounded civilized!” He takes out a gold-plated snuff box and puts a small pinch to his nostrils.

Barnaby Bacle shakes his head sorrowfully. “I wish I could believe that you are truly loyal to the cause of King George. But I think you may have another purpose for giving aid to the Tories.” He clucks to his horse and rides slowly out of the clearing.

A wolfish grin draws back Jeremiah Peckinpaw’s thin lips as his co-conspirator disappears into the trees. “You fool,” he mutters. “Of course I have another reason.” He croons to his horse in a silky voice. “The whole of Massachusetts will be mine once the British win the war. After that, the Society of Brutus will take control, and believe me, Lucifer, one day the entire land shall be ours!” He slaps the horse sharply on the flank and gallops off.

“So much for Peckinpaw the Patriot, huh?” Bevatron says as the team resumes its march to the Colonial camp.

The BRUTE director smiles slyly and says nothing as you descend the slope and tramp through a forest of black oak and hickory. The

sky has gotten noticeably darker, and a few large snowflakes are falling. Your foot catches on a root, and as you pick yourself up off the ground, you feel a hard object pressing into your ribs.

“Move a hair and you are dead,” a rough voice tells you.

You look around to find a rifle nudging you. The man who's holding it wears a coat that is even more tattered than your own. His left hand is wrapped in a stained and ragged bandage.

“I got the rest of 'em, Ethan,” someone calls out to him.

“Dirty Tory spies,” the man mutters, shoving you ahead of him. When you reach the rest of the team, you see that they've been taken prisoner, too. Your captors are hard-looking men with threadbare clothes and pinched, cold faces.

Ethan, who seems to be the leader, grabs you by the neck. “What say ye, boys? Do we string 'em up?”

You gulp and wonder how it will feel to twist slowly in the wind.

CHAPTER

5

Mission Day 01

One Mile from Colonial Camp 5:02 P.M.

“Wait!”. Caesar exclaims before your captors can do any damage. “We are not Tory spies — we’ve come to join General Washington’s army.”

“What makes you think we’d take a puny bunch like you?” Ethan growls.

“I am a doctor and this is my assistant.” The team leader waves his beat-up leather satchel toward Bevatron. “Why don’t you let me take a look at your hand? At least I could change that bandage for you.”

Before the man can make up his mind, Caesar opens his bag and removes a blue glass bottle and a soft cotton cloth. He gently peels the old rag from Ethan’s hand.

You don't say a word as the raw, purple sore is exposed, but it turns your stomach.

"I hear tell you're short of a doctor in the camp. A sawbones like me could be useful," Caesar says as he cleans and wraps the wound.

"I reckon you might, at that. I don't know what was in that potion you put on, but my arm don't hurt no more. I thank ye." Ethan flexes his fingers and studies the ACT leader solemnly. "The general put me in charge of patrolling these woods, and it's my job to see that no enemies slip by. If you'll vouch for these others, I will take you to the camp. Ned . . . Joshua . . . put down your shootin' irons. These folks ain't Tories."

Half an hour later, you stand shivering outside the peaked tent that serves as General Washington's headquarters — the "marquee," you heard Ned call it. The scene around you is crackling with activity. Everyone is busy — some carrying logs, others mud, while the rest put the two together. The smell coming from a steaming pot slung over a nearby fire reminds you that it's been a long time since your last meal. *Over 200 years, give or take a few*, you tell yourself with a grin.

"The general will see you now," Ethan reports to Caesar when he finally reappears. "The rest of you are assigned to me. C'mon, I'll show you where to stow your gear."

"Keep a close watch on Peckinpaw. I'll get back as soon as I can," Caesar whispers.

More than anything in the world, you want to meet George Washington. But you weren't invited, and Ethan doesn't look like the type you can keep waiting. So you follow your new leader to a tattered tent not far from Valley Creek.

" 'Taint much, but it's better than some's got. Tomorrow we start building a hut for the squad," Ethan says, then adds, "Hope you brought your own supply of grub. We ain't got none to spare."

"We did a heap of huntin' before we ran into you," Bevatron pipes up. "I'm goin' to fix up a mess o' stew that you're welcome to sample." She stops as though she's remembering her place in the scheme of things, then adds, "Dr. Caesar told me to invite you."

"That's right kind of him. It's been a good long time since I had any meat," Ethan says wistfully. "But it wouldn't be right for me to stuff myself while old Ned and Joshua go hungry. See, we're the last of our squad, and they look up to me."

"Bring 'em along!" Hot Wheels calls after him. "We've got extra."

"Honestly!" Peckinpaw storms. "We hardly have enough food for ourselves and you want to feed the whole army."

"Never underestimate ACT's efficiency," Bevatron replies calmly. "And don't knock our dinner guests. They might be able to help us locate Bacle," she warns.

Peckinpaw scowls. "But you must admit they're not the sweetest-smelling gentlemen. I probably won't be able to eat a bite."

"Then sit upwind or don't eat!" Bevatron explodes. "I certainly prefer the scent of honest sweat to the skunk's trail you leave in the air! Now make yourself useful — take the canteens and get some water!"

"That's telling him, Bev," Hot Wheels says as the BRUTE director stomps off.

"I shouldn't have popped off like that. He's a dangerous man." Her dark eyes grow thoughtful. "It's only a hunch, but I think Peckinpaw might be having a change of heart. The conversation we overheard back at Windy Bluff could have given him new ideas about the outcome of this mission."

"What kind of ideas?" H.W. asks.

"Suppose he figures it's to his advantage to let the mad scientist, Bacle, blow up the camp? After all, Jeremiah Peckinpaw did say that the British promised him Massachusetts if they won."

You see her point immediately. "So back in the future, this Peckinpaw would inherit it from him. If he keeps us from stopping Bacle, BRUTE could gain control of the whole United States!" you say.

"Sh-h-h! He's coming back. Don't mention this again. I'll let Caesar know what we suspect," Bevatron whispers.

That night's dinner party is a huge suc-

cess. After polishing off the last of the savory stew, Ethan belches with pleasure.

“Ain’t et a meal like that since I left Carolina,” he sighs. “You come just in time.”

You smile to yourself over Ethan’s unintended, but apt, choice of words.

“What’s the matter, Doc? Vittles not to your likin’?” Ned remarks to Caesar.

The ACT leader has barely touched his food. You’ve noticed that he’s been strangely silent since he returned from his meeting with General Washington.

“I just can’t get over meeting George Washington,” Caesar says slowly. “If I live to be a hundred, I’ll never forget the honor.”

“Most folks feel like that. You think we’d all be here, starvin’ and gettin’ sick in this miserable cold if it wasn’t for him?” Ethan observes. “Many’s the time I seen him take money from his own pocket to get something one of us needed. If we can win this war, the Colonies will stay a fine, free place to live.”

“Amen,” Bevatron offers softly.

A sudden ruckus outside the tent cuts through the emotion of the moment. “Ethan, get out here quick — Zeke’s at it again,” someone yells.

You all rush out of the tent to find two soldiers tightly holding on to the arms of a third. The captive, who hardly looks older than you, is white-faced and wild-eyed.

“I seen it — I swear to you I seen it,

Cap'n Ethan. It was real — I tell you it —”
The teenager breaks into wordless sobs.

“What was it you seen this time, Eze-kiel?” Ethan asks impatiently.

“An egg, Cap'n — bigger than any chicken in this world could lay — and it was all shiny. It looked like somebody painted it with swamp fire.”

“A sad case, Doc,” Ethan whispers. “The boy ain't right in the head, you know? Think you could talk to him?”

Caesar nods tersely. There is an excited look in his eyes that tells you he's on to something. “Where did you see this egg, son? Was there anybody nearby?”

Zeke nods his head eagerly. “Yessir — a little bitty man with a bald head and funny clothes. He was totin' a bundle. Must've been heavy, 'cause he was stumblin' a bit.”

“Where? Tell me where you saw him.” Caesar is practically shaking the boy's arm off.

“In the woods by the stream — just before you start up Mount Joy,” Zeke mutters.

“Mount Joy?” You are confused. You thought the hill beside the stream was Mount Misery.

“Valley Creek flows in the gorge between two hills,” Bevatron supplies in a low tone. “The one inside the camp is Mount Joy.”

“Hold on, Doc. Don't pay him no mind. Zeke has visions all the time, but it don't mean nothin',” Ethan says, frowning.

“The only way to cure a sickness like this is to take the patient back and let him relive the vision. Trust me, Ethan. I can help him,” Caesar pleads.

“Best just to forget it and get a good night’s rest. Remember, we got a lot of work tomorrow. The boys will take Zeke over to the stockade — just until he calms down. You can talk to him in the mornin’,” the squad leader decides, yawning. “Thankee for the grub, and by the by, don’t leave your digs. My boys shoot anything that moves after the sun goes down.”

After that warning, there is nothing to do but file back into the tent.

“Bacle’s arrived,” Caesar announces grimly. “Zeke must have seen the time machine just as it materialized.”

Hot Wheels rubs his beard anxiously. “What can we do, boss? Old Ethan’s not going to let us go out looking tonight.”

“We’ve still got all day tomorrow to find him. At least now we have one clue to his identity,” Bevatron observes. “With all five of us looking for short, bald men, it —” She stops and her eyes narrow as she looks around the inside of the tent. “Where’s Peckinpaw?” she rasps.

None of you saw him slip away into the darkness.

CHAPTER

6

Mission Day 02 Valley Forge 5:27 A.M.

You wake up with a dry, furry taste on your tongue and the sound of an off-key bugle pounding away at your eardrums. You have no idea where you are, but you're pretty sure you don't want to be there—it's icy cold and your back feels as if you've spent the night on a sack of gravel.

“According to Peckinpaw's estimate, we have exactly 18 hours and 3 minutes to defuse Bacle's bomb, Orion. Snap to.” Caesar's crisp command brings you instantly alert.

“Did Peckinpaw come back yet?” you ask. There was no sign of him the night before when Caesar ordered you to sleep.

“No, and if what Bevatron suspects is true, our job's going to be doubly difficult. Not only will we have to locate Professor Bacle, we'll have to fight Peckinpaw to do it.” The

ACT leader's face looks like a thundercloud. "Anybody have any brilliant ideas about where to start looking?"

"I think he'll head straight for Windy Bluff," Bevatron speculates.

"Why would he go there?" H.W. asks.

"To warn his great-great-grandfather to keep away from here tonight." Bevatron's face hardens. "Our Peckinpaw wouldn't want to risk having his ancestor anywhere near a nuclear explosion. Even if he didn't get blown to smithereens, there's no telling what damage the radiation would do to the Peckinpaw genes."

"Smart thinking, Bev. You and H.W. go looking for him," Caesar orders. "And while you're up there, look in on the time machine — I'm worried about that power shortage. After I report to the hospital hut, I'm going to the stockade to talk to Zeke. If I handle him right, maybe he can pinpoint Bacle for us."

"What about me, chief?" you ask, hoping your assignment will allow you to test out your new canteen computer.

"Sweep the camp for traces of radiation. I know it's a big job, but start in the center — that's where he's most likely to strike." Caesar turns to the ACT nuclear expert and adds, "Bevatron, give everybody one of the miniature detectors you brought along."

The woman hands you a thin metal disk the size and weight of a silver dollar to pin in-

side your undershirt. It feels almost hot against your skin.

“If you come within 30 yards of the nuclear device, the detector will cool off,” she tells you. “The closer you are, the colder it will get.”

“Come get me immediately if you find anything. Don’t take any action on your own,” Caesar orders. “I don’t need to tell you to cover for each other — and that includes Peckinpaw.”

As you wish the others good luck and step out into the chill morning breeze, thoughts of waffles and crisp bacon tease your empty stomach. You remember your secret stash of grape sour balls, but resist the temptation to dig in — with so many *really* hungry men in camp, it doesn’t seem quite right.

To take your mind off your appetite, you let your eyes wander over the expanse of the hill in front of you, Mount Joy. Given the hardships of the winter at Valley Forge, it seems to you that the names of the two mountains should be reversed — Mount Misery should be inside the camp!

Getting back to the business at hand, you decide to scout around the general’s headquarters first. If you were Bacle, that’s where you would set off the device. But before you get very far, Ethan’s muffled voice brings you to a halt. “Wait up. There’s work to be done. Where’s the others?”

You bite your lip to hide your frustra-

tion. If you can't get rid of him fast, you won't finish your assignment. "Mornin', Captain Ethan. Doc went over to see Zeke. The rest of the squad's . . . er, out looking for grub," you say, waving your hand vaguely toward the woods.

You have to stifle a grin as you turn to face the man — the floppy ends of a rag tied around his swollen face perch on top of his head like rabbit ears. "You got a toothache?"

"Pair of 'em. Guess I need some more teeth yanked out," he sighs grumpily. "How many you missing?"

"None," you reply.

"If you ain't lyin', you're danged lucky. Folks lose their teeth early in this neck of the woods. Most are gummin' mush by the time they're 30." He studies you curiously, then shrugging, motions for you to follow him. "Get a move on. Ned and Josh are waitin'. That cabin ain't gonna build itself, you know."

Two hours later, your arms are aching and a splinter has lodged itself into the ball of your thumb, but the hut where the squad will winter is taking shape. Ethan has made it plain from the beginning that captains watch and soldiers work. He sits on a stump, his face wrinkled with concentration.

As you trudge over to add some wood chips to the pile of litter by the stream, you suddenly feel chilly. You straighten up quickly when you realize that the detector inside your

sagged to his chest. "How'd you do that without usin' your fingers?"

"I got a knack for it," you reply, racking your brain for a reason to check out the arsenal next door. Inspiration hits! "Say, Captain, since we're about finished here, I could go over to pick up a supply of powder and lead for bullets."

Getting Ethan's agreement is easy, and after promising the reluctant but hungry man guarding the ammunition storehouse a share of any game you bag hunting, he lets you inside.

The detector feels like an ice cube against your chest. Stepping gingerly over a pile of cannonballs, you raise the edge of a mildewed tarp draped over an object in the corner. What's underneath tears a long, sharp gasp from your throat. A metal globe the size of a large pumpkin glistens against the hard-packed dirt floor.

Your eyes tell you it doesn't belong here. Its bulging sides have markings that could only have been put on in the 20th century.

The tarp seems to be suspended above the globe in empty air. Connected to the device by a thin wire, a series of dials protrude into space. Your shaking hand is stopped six inches from the glittering metal surface — there must be some sort of force field protecting the device.

"The bomb," you whisper numbly.

"How's that?" Ethan's pain-filled drawl

shirt has gotten at least 20 degrees cooler! That means you're close to a radiation source. You scan the area around you and notice a fire-blackened building 20 yards to the left. A lone sentry is pacing up and down in front.

"What's that house over there, Captain Ethan?" You try to be calm, but your voice betrays your excitement.

"That's about the only thing the British left standin' when they come through here in September," Ethan replies sourly. "We're storin' ammunition in it till we git a proper arsenal built. Now quit botherin' me — I need quiet when I'm countin'!"

"Sorry. Can I help you with something?" Above all, you don't want to rile the man. He could find chores for you till midnight, and you've got to get away from him — fast.

"Can you do sums?"

You have to think a minute before it comes to you that he's asking how good you are at arithmetic. "Sure, what's the problem?" you reply confidently.

"There's eight in my squad now, countin' you new folks, and I've got to get some ammunition. If each one gets three musket balls a day, how many do we have to make for a week?"

Almost before he's finished, "168" comes out of your mouth.

If his jaw weren't tied up, it would've

comes from behind you. You spin, covering the sinister-looking object before he can see it.

“I was telling myself to be calm,” you reply quickly. “I thought I saw a rat. I never could stand those things.” You move to position yourself between the captain and the tarp, but he brushes past. The coldness in your chest spreads over your whole body as he saunters over and sits right on the bomb!

“You’re lookin’ in the wrong place for the lead,” he tells you. “Try that pile of stuff over by the window.”

You’re so nervous that you kick over a small sack of gunpowder in your path. You have to scramble to recover every precious black grain.

“Ow!” Ethan moans.

You jump, thinking that maybe his pain has something to do with the bomb. But then you remember his teeth.

“Listen, Captain. The doc has some medicine that will make your teeth feel much better. Come with me. I’ll take you to him.”

As you hustle Ethan out the door, the tension inside you is almost unbearable. If Bevatron can’t get past the force field and defuse that bomb in time, Ethan won’t have to worry about his toothache.

CHAPTER

7

Mission Day 02

Valley Forge Infirmary 10:27 A.M.

To call the medical hut in the camp a hospital is really stretching a point. Soldiers with broken bones, bloody bandages, runny sores, are stacked like cordwood outside. "The new doc ain't here. I been waitin' half an hour fer him myself," a soldier with his arm in a sling tells you when you finally push your way inside. "A cannon backfired over on the ridge and he went to look after the wounded."

"Down past the general's marquee."

"Thankee kindly," you say, preparing yourself for a mad dash through the camp.

"Hold up there, young 'un!" a man lying on a cot calls to you. He shivers, then wipes his watery blue eyes with a trembling hand before he continues. "What's your name?"

"O-Orion," you reply. *He must be at least 60, you tell yourself. What's an old guy like that doing in the army?*

The elderly soldier speaks weakly. "You're the one the sawbones was frettin' about. He said if you showed up, I was to tell you not to waste time lookin' fer him — just grease the wagon wheels and then head home."

Wagon wheels? You look blank until the meaning of the cryptic message hits you — Caesar must have been trying to tell you to find H.W. and Bevatron.

You pass quickly through the lines of waiting men, avoiding Ethan as he tries to snag you. "Gotta find the doc's assistant," you tell him. "He knows a lot about bad teeth, too."

When you reach the edge of the camp, you slow down. The area is heavily patrolled and you don't want to give any trigger-happy sentry the idea that you're a deserter.

"Where do you think you're goin'?" a flinty-eyed guard questions suspiciously.

You see a battered tin pot lying abandoned on the frozen ground just in time. Scooping it up, you walk casually toward a clean snowbank. "Collectin' water for the doc over at the hospital. This way's easier than going to the creek." You pack in the snow until the sentry loses interest and continues on his rounds. As soon as the coast is clear, you slip into the cover of the underbrush.

It seems as if you've been walking through the woods toward Mount Misery for ages. The pale sun is considerably higher in the sky than it was when you left the infirmary. Checking

the time function on your canteen, you find that it's now well past 11:00. You wince at how fast the time is going. "Twelve more hours — that's all we've got," you say grimly, fighting through the brambles.

"*Ps-s-s-t!*" The hissing sound tightens your chest with dread. You cover the next 10 yards in three seconds.

"Come back here, you idiot — I need your help!" a familiar, sneering voice rasps behind you. You have found Nathaniel Peckinpaw.

You notice his limp immediately. And the lower part of his body is so caked with mud you can't even see his trousers. As he moves closer, you realize that he's not wearing any.

One look, and you can't stop laughing. You'd pay big bucks for a camera — imagine a photo of the pantsless Peckinpaw on the cover of *Time* magazine!

"I'm so glad I could provide a moment of enjoyment in your dreary day, you insensitive imbecile," the BRUTE director growls. "Now kindly pull yourself together and go back to the camp to fetch me some pants!"

"I can't — I've got to get to Hot Wheels and Bevatron. They've been out looking for you for hours." The scent in the air as he approaches sets you off again. The suave BRUTE director smells like a hog farm.

"Oh, those two. Well, you needn't worry. They're safe enough for the moment," he says.

"What do you mean, 'for the moment'?"

Have you seen them? Where are they?" Your questions tumble over each other.

"Even as we speak, they're cowering in the confines of my great-great-grandfather's smokehouse. They were stupid enough to let themselves be captured by the Society of Brutus. Knowing of their predicament, I was of course on my way for help when I met with a most unfortunate accident. Those swine chewed my trousers!" He pauses to brush at the legs of his underwear in disgust. "I may never eat bacon again as long as I live."

"Never mind that. Are you talking about the smokehouse in the clearing where we hid the time machine? Why were they taken there?"

"Because it's headquarters for the society," Peckinpaw reluctantly admits.

"Then what are we waiting for? Let's go!"

In the time it takes you to climb the slope leading to the landing site, Peckinpaw tells you his version of the events.

"I was afraid that our Professor Bacle might try to harm my great-great-grandfather, Jeremiah," Peckinpaw tells you. "So I went to find Bacle myself. I followed his trail to the stable behind the Big House at the Windy Bluff stronghold. Before I could search the grounds further, I was captured by my own great-great-grandfather's guards."

"Serves you right," you snort. "Get to the part about Bev and H.W.," you prompt.

He ignores you pointedly. "The guards

locked me up the minute they caught me — as well they should. They didn't believe for one minute that I was distantly related to the family." He chuckles. "I really can't blame them. No true Peckinpaw would be caught dead in these loathsome rags."

"Bevatron and Hot Wheels?" you remind him impatiently.

"Oh yes. They found me in the stable, but in the process of getting me out, they were caught and taken to the smokehouse to await Jeremiah's justice. Fortunately, I managed to slip away in the confusion."

You all but choke on your anger. "You mean they saved your skin and you didn't lift a finger to help them? Boy, you're an even worse creep than I thought!"

"The difference between success and failure is practicality. It would have done them no good for me to be recaptured. This way, I've brought them help."

You are now so near the clearing that further talking would be dangerous. Dropping to the ground, you worm your way close enough to hear the conversation among the four toughs guarding the smokehouse.

"Good thing for them two spies we caught that Mr. Peckinpaw went off to Philadelphia last night," one of them says.

"Yeah — old Jerry don't take kindly to trespassers. He'd a had us . . ." The way the second thug runs his finger across his throat

leaves nothing to the imagination. The long white scar running down the fellow's jaw tells you he's had a lot of experience with knives.

"When's old Jerry supposed to come back?" the third one asks.

"Not till after the Tory raid tonight. Guess he don't want to be around when it happens," Scarface replies. "One thing about Jerry — he keeps his skirts clean. That old boy's got both sides fooled, ain't he?"

You signal for Peckinpaw to follow you back the way you came. "We'd never be able to overpower those goons," you say. "We've got to think of some other way."

"And what would you suggest?"

"Well . . ." You trail off, hoping for the seed of an idea. You are rewarded with a full-grown crop! "I wonder how you'd look in a powdered wig?" you muse.

"What are you getting at?"

"Your great-great-grandfather's 'out of town and won't be back until sometime tomorrow. If we could get some of his clothes from Windy Bluff, you could dress up and fool those guys into letting Bevatron and H.W. go."

"What makes you think we could get away with a stunt like that?" he interrupts.

"You look just like Jeremiah. With the right clothes and a wig, you could pass for him easily," you tell him.

"Why should I risk my neck to save two ACT agents?" he snarls contemptuously.

All the determination on earth is in your eyes as you glare down Nathaniel Peckinpaw. You start to tell him that you know where the bomb is, but then you think better of it. You don't trust him any farther than an ant can spit. "Bevatron's the only one of us who can defuse the bomb. If you don't help get her out, you'll go up in smoke with the rest of us when it blows," you tell him with steel in your voice.

"Nonsense. The bomb has an effective radius of about two miles. No harm would come to me if I left the area."

You already have an answer for that argument. "Sure, but you can't operate the time machine, so you'd still be stuck back here in the past. Are you willing to lose your fancy yachts, big cars, and the BRUTE empire that you've built?"

"When you put it like that, you persuade me that your plan may have some merit," he admits. His glance carries admiration. "In fact, I like it — it'll be good to have decent clothes to wear."

As you head for Windy Bluff, he taps you on the shoulder. "I could use someone with a brain like yours — ever thought of working for BRUTE?"

"Not even in my nightmares," you answer quickly.

CHAPTER

8

Mission Day 02 Windy Bluff Woods 3:48 P.M.

“You could have at least *tried* to get me a weapon. It’s suicide to go in unarmed,” Peckinpaw grumbles, adjusting the three-cornered hat to a jaunty angle on top of his powdered wig.

“I’m lucky I got out of that house with my skin! The butler kept looking at me as if I was going to run away with the silver,” you snap. Irritation bubbles up in you at his criticism — you’re the one who’s taken all the risks so far. Your legs are still shaking from the walk to the mansion through a squad of suspicious guards.

“You were never in any real danger,” the BRUTE director snorts. “Nobody would have dared to touch you while you were carrying the Peckinpaw family crest. I’ll take my ring back now, if you please.”

You hand him the heavy gold circle, hat-

ing to admit to yourself that his plan had worked so well. You had posed as a messenger from Jeremiah, telling the butler that his master had decided to spend a few more days in Philadelphia and needed a complete change of clothing. Neither the sentries nor the manservant had argued when you flashed that ring.

Peckinpaw flicks a speck of lint from his wine-colored velvet sleeve. He looks every inch the Colonial aristocrat. Before you realize what's happening, he grabs your collar and marches you toward the clearing where the time machine is hidden. "Remember to act scared," he orders. "And keep your mouth shut. If this crazy masquerade is to work, I have to do all the talking."

He gives you a hearty shove, and with a surprised squawk, you tumble into the midst of the four guarding the smokehouse. They spring up, reaching for their muskets.

"Don't touch those guns, you mangy dogs! Would you risk hitting Jeremiah Peckinpaw?" Nathaniel Peckinpaw thunders, striding over to stand in front of you.

The quartet gapes at him in white-lipped fear.

"You've got a lot of explaining to do. Why have you allowed this trespasser on my property?" The imposter points an accusing finger toward you.

Old Scarface is the first to react. "We found two of 'em. They're locked up over yon-

der, Mr. Peckinpaw. Another one got away, but the boys are out lookin' for him. We'll have the whole lot by —"

"There are others? Bring them to me at once," Peckinpaw demands.

The ACT captives are dragged out of the smokehouse. Their hands are tied, and a fresh bruise purples the skin of Bevatron's tan face. When Hot Wheels sees you sprawled on the ground, he strains forward with a smothered curse.

"I'm okay," you assure him, scrambling to your feet. You try to signal him to be cool.

"Well, well, well — what do we have here? Be ye Patriot spy or just a yellow-bellied runaway?" the BRUTE director challenges Bevatron. Before she can speak, he grabs her arm and pushes her over beside you. You nudge her to stay still.

Scarface makes a protesting move. "Be careful, sir. These two gave us a lot of trouble. We —"

"How dare you speak before I give you permission, you scum?" The fake Jeremiah's eyes flash cold steel. "Your loose tongue will be the death of you yet. By the way, are you brave enough to call me 'old Jerry' to my face?"

The man turns ashy pale. "I — I — I —," is all the fishlike motion of his lips can produce.

Peckinpaw dismisses him with a con-

temptuous wave of his hand. "Give me that pistol, swine. I'll show you how to deal with spies! Untie that one. I'll not shoot a man who's trussed up like a turkey," he snaps at the second guard.

As soon as H.W. is free, Peckinpaw raises the pistol and aims straight for his heart. For a bloodchilling moment, you think that the BRUTE director is actually going to fire!

Then the imposter turns the gun on the confused guards. "Drop your weapons. H.W., get their muskets and search them for other weapons," he commands.

Once the guards are safely stashed away in the smokehouse, Hot Wheels heads for the "toolshed" to check on the time machine. Peckinpaw reluctantly changes back into his mud-spattered long johns and buckskin shirt. His cold glare dares you to laugh.

"I don't like the looks of it," Hot Wheels reports worriedly as he rejoins the group. "The energy source seems to have developed a slow leak."

"Will we have enough power to get back?" you want to know.

"Just barely — if we leave here no later than 12:35 tomorrow morning," he replies.

"Then there's no problem," Peckinpaw joins in confidently. "We'll stop Bacle by 11:30 tonight. That gives us plenty of time for a leisurely stroll back up Mount Misery before we take off."

You wish you shared his optimism, but so very little of this mission has gone according to the game plan. *A lot could happen between now and 12:35 tonight*, you think with a shiver of foreboding.

In less than 10 minutes, ACT is halfway down Mount Misery and traveling fast. You brief H.W. and Bev on the events of the day, leaving out only the part about the bomb.

“Thank you, Mr. P. — it took a lot of courage to do what you did back there,” Bevatron says quietly.

“Save your gratitude for someone who needs it,” the BRUTE director mumbles.

As you trudge tiredly up to the canvas shelter where the team spent last night, Caesar is waiting.

You can hold your news no longer. “I know where the . . .”

“About time you showed up.” The ACT leader cuts you off, glaring particularly hard in Peckinpaw’s direction.

“Caesar, the detector —”

“Don’t interrupt me! All of you disappeared when there was work to do. I’m ashamed to be on the same squad with such good-for-nothings.”

You wonder if there’s something wrong with his neck — his head keeps jerking back toward the tent. “But Caesar, I found the —” His hand covers the important part of your sentence.

“Think we should have ’em flogged, Cap’n Ethan?” Caesar yells over his shoulder.

A muffled groan comes from inside the tent.

Bomb, you mouth silently.

The leader nods in understanding, and his eyes light up with relief. “Good thing Ethan’s a kindly man,” he thunders. “Now, you three, *git!* — and don’t come back till that cabin’s got a roof on it!”

As Peckinpaw starts to follow, Caesar grabs his arm. “Not you, my friend. You’re going to stay where I can keep an eye on you.” The leader’s whisper is filled with deadly menace.

Scurrying silently under cover of the gathering dusk, you reach the cabin site in record time. *It will be a piece of cake to sneak into the ammunition storehouse from here, you think.*

But you are wrong. First of all, Ned and Joshua are toasting themselves in front of a fire they’ve fueled with wood scraps. The flicker of flames lights up the whole area.

“So much for the cover of the darkness,” Bevatron mutters in disgust. “Now what do we do?”

“Stay back and leave it to me.” Hot Wheels strides over to the two soldiers, booming out, “How are you, fellows?”

Their disgruntled looks make it clear what they think of goof-offs.

“Found me a nice fat Tby sneakin’ around in the woods. He was nice enough to provide supper for tonight.” The Acting Director of Transport digs into his pocket and produces a handful of beef jerky. Another try brings out a supply of dried apricots. “It isn’t fancy, but it beats being hungry. I got more — think that fellow over there would like some grub?” Hot Wheels nods in the direction of the very interested armory guard.

“That man’s a born genius,” you crow as you and Bev slip through the door of the storehouse. You flip back the tarp and expose the bomb. The powder horn slung over Bevatron’s shoulder contains a flashlight. In the small but intense beam it gives off, she examines the controls off to the side of the device.

“These gadgets activate the force field,” she tells you. “I remember an equation that might turn it off, but it’s complicated, and we don’t have time to fool around. Orion, is there anything you can do?”

“Hold the light steady,” you say, reaching for your canteen computer. In a little while you’ve managed to write a program that just might work — with a little bit of luck.

Type the following program into your computer. Line 200 must be typed as one line on your computer.

The program is a game. You have to guess

which frequencies (between 1 and 30) will deactivate the force field. The screen represents a frequency meter. The asterisk is the value you're looking for. Each time you guess a number, an arrow shows you how close your guess is. Choose a higher number and the arrow will move to the right (toward 30). Choose a lower number and move it to the left. Three correct entries are needed to deactivate. However, if you get five wrong before you get three right, the device will explode.

PROGRAM 4

```
10 REM      DEFUSE THE FORCE FIELD
20 C = 0
30 S = 38
40 X1 = INT(RND (1) * (S - 1)) + 1
50 X2 = 99
60 PRINT
70 GOSUB 250
80 PRINT "WHAT NUMBER(1..";S;")";
90 INPUT X2
100 GOSUB 250
110 IF X1 = X2 THEN 160
120 PRINT "WRONG"
130 W = W + 1
140 IF W = 5 THEN 200
150 GOTO 70
160 R = R + 1
170 PRINT R;" NUMBERS RIGHT!"
180 IF R = 3 THEN 220
```

```

190 GOTO 40
200 PRINT "FORCE FIELD EXPLODES -
      - YOU DIE!"
210 END
220 PRINT "***** FORCE FIELD"
230 PRINT "      DEACTIVATED"
240 END
250 PRINT
260 PRINT "!";
270 FOR I = 1 TO S
280 IF X1 = I THEN 320
290 IF X2 = I THEN 370
300 PRINT " ";
310 GOTO 380
320 IF X1 = X2 THEN 350
330 PRINT "*";
340 GOTO 380
350 PRINT "#";
360 GOTO 380
370 PRINT "^";
380 NEXT I
390 PRINT "!"
400 RETURN

```

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	99/4A	400/800
	✓	✓						

This program will run on the Apple II+ and Apple IIe. See the Reference Manual, page 122, for changes for other computers.

The tarp draped over the back of the bomb collapses with a tired *whoosh*. Bevatron's sensitive fingers wander gingerly over the gleaming metal surface of the bomb. You see at least 20 dials and controls.

"Can you disarm it now?" you urge her. "Sounds like dinner's nearly over out there. You'd better pull the plug before the guard comes back, or we'll be in deep trouble."

Bevatron sits back on her heels. "We're already in deep trouble," she murmurs. "When we deactivated the force field, we set off the timing mechanism. Now the bomb can only be defused by fitting a special key into the slot on top. Put in anything else, and it's the big boom." Her face is a portrait of desperation. "What do you want to bet that Bacle has that key in his pocket? We've got to find him!"

"How much time have we got?" you ask. Your knees are knocking like a '56 Chevy.

"Maybe hours, maybe minutes. Only Bacle knows for sure."

CHAPTER

9

Mission Day 02 Valley Forge 7:03 P.M.

“The ball is in your court, Peckinpaw—you’re the only one who knows Bacle. There’s got to be some way we can identify him. Think, man!” Caesar prompts grimly.

“Get off my back, will you? I’m doing the best I can!” In the light of the campfire the BRUTE director’s forehead glistens with bullets of perspiration. He’s been out searching the camp for the past hour with no luck. “I told you Bacle’s a master of disguise, but I can pick him out if I get close enough,” Peckinpaw offers slowly. “There’s a fish-shaped birthmark on his left shoulder.”

“There’re almost 10,000 men in this camp! What are we supposed to do, line them up and have them strip?” Hot Wheels snorts. “Besides, he’s probably a hundred years away by now. I wouldn’t stick around for the fire-works if I were him.”

“No, he won’t move the time machine until he’s dead certain nothing can interfere with his plan. I know the man,” Peckinpaw says stubbornly.

“Okay, okay — this hassling isn’t getting us anywhere.” Caesar’s voice takes on a more patient tone. “Once again now, Peckinpaw. Give us everything you know about Bacle. Don’t leave out a single detail, no matter how silly it is.”

“What can I tell you? The man’s a 40-year-old zero. He doesn’t smoke, doesn’t drink — no bad habits at all unless you count the Peanut Butter Cups.”

“Peanut Butter Cups? As in candy?” Bevatron presses.

“Bacle eats them by the gross. So what?”

The sudden vision of Ethan’s rabbit-ear bandage flashes into your mind. “His teeth!” you yell. “If he puts away that much candy, he’s got to have a lot of fillings. Nobody else around here has modern dental work. Find a man with a mouthful of metal and you’ve got Bacle!”

“Good try, but it won’t work.” Peckinpaw shakes his head glumly. “I told you he was compulsive — he brushes six times a day and never forgets to floss.”

“It doesn’t matter — in this day and age, a 40-year-old man with perfect teeth is a near impossibility. You’ve done it again, Orion!” Caesar pounds your back in congratulation.

“And we don’t have to look at all the

men — just the ones who joined up since yesterday,” Bevatron adds.

With help from Ethan, three dozen shuffling, complaining soldiers are lined up in front of the hospital hut. One by one, Ethan motions them inside.

“You sure there ain’t no way I kin catch this new kind of plague the sawbones is afraid of?” he asks you anxiously.

“Not a chance,” Hot Wheels responds. “The stuff Doc gave you to drink will protect you. But like he said, we’ve got to check all the new recruits.”

“Every last mother’s son,” Ethan answers, taking another swig of the doc’s “medicine” from his canteen.

You have to bite your lip so you don’t laugh. The pills Caesar gave Ethan, Ned, and Joshua changed the water in their canteens to 80 proof brandy. They all seem to be enjoying the prescription.

As Ethan shoos the next patient in, you look at the shortening line nervously. Suppose Bacle’s hiding out in the woods until zero hour? Suppose he managed to disguise his teeth? Suppose . . .

Your anxious musings are cut short by a scream of pure rage.

“It’s the plague carrier — stop him!” Caesar yells as a short man barrels through the door.

You do your best to tackle him, but you

miss the hem of his coat as he flies by. Hot Wheels is caught completely off guard — Bacle shoves him into Ned, who accidentally slams Joshua with a perfect stiff-arm. He's one yard from certain escape when the BRUTE director steps from behind an oak tree. With a lazy flick of his foot, he sends Bacle sprawling headlong into a snowbank.

"It's all a matter of timing, wouldn't you say? Some of us have it, some of us don't." Peckinpaw favors you with a sardonic smile as he picks Bacle up by the collar.

"*Aarg-h-h!*" the little man protests, flailing wildly with his arms. As he looks at his captor, his hate-filled eyes grow crafty. "You will hang for this, you — you — Tory cut-throat! Captain, take me to General Washington immediately. I am aide-de-camp to Major General Benedict Arnold, and I have knowledge of a Tory plot."

"Benedict Arnold! How dare you speak of that traitor in the company of loyal Patriots," Peckinpaw sneers. He's really getting carried away with himself.

"Oh Lord, he's really put his foot in it now," Bevatron says. "Arnold isn't a traitor — at least, not yet," she whispers. "He's a hero. The Continental soldiers idolize him. Nobody will know he's a traitor until 1780."

You suddenly see a very good reason for memorizing dates and facts. If Peckinpaw had paid more attention in history class when he was

a kid, Ethan wouldn't be staring at him as if he just sprouted two heads.

"I'll nail your lying tongue to the barn door," the captain roars, charging like a maddened bull.

"This could get ugly, Orion. Get out of here while you have the chance," Bev tells you.

"No way I'm going to leave the rest of you." Your jaw sets in a stubborn line.

"Yeah? And what about the bomb? If we all get thrown in the stockade, who's going to stop it from blowing the camp to kingdom come?"

You have to admit she has a good point. Step by step, you sidle toward the nearest tree. You flatten yourself against its rough bark out of sight just as Ethan orders, "Into the hospital, the whole bunch of you. I'm gonna get this straight."

It's fairly easy for you to wiggle over until you're hidden from view by the hut. The angry voices come loud and clear through the cracks between the logs. After the shouting dies down, things seem to be going pretty well for the home team. Caesar has Ethan almost convinced that Bacle is a lunatic when the wily scientist plays his trump card.

"Don't you recognize the man who tripped me? He's Jeremiah Peckinpaw. Now ask yourself why he's dressed like a common soldier." You can hear the raspy wheeze in the crackpot's breathing. "He's the President of

the Society of Brutus, that's why — and he's here to kill the general!"

"Saints!" Ethan growls. "If what he's saying is true, Nathaniel, we'll have you at the end of a rope within the hour. And the rest of you'll swing with him!"

Caesar's laugh rings out. "Jeremiah Peckinpaw is one of the most loyal men in these colonies! How dare this man accuse him of treachery! Captain, doesn't that tell you he's lying?"

The voices stop for a minute. The next thing you hear is a thump.

"What's the matter, Captain — you don't look so well," Bevatron pipes up. You wonder if Ethan has passed out from the brandy "medicine."

"Take some more medicine, Ethan. You don't want to risk catching the plague from this man," Caesar urges.

You hear a gurgling, then the captain's noticeably slurring bass continues, "I'm puttin' you all in the stockade tonight. The general can decide who's — *hic* — right or wrong in the morning."

"But — but," Bacle's tone rises in desperation.

"That seems fair, Captain Ethan," Caesar cuts him off. "But promise me you and the boys will be sure to take that medicine every 15 minutes — can't have the squad coming down with the plague, now can we?"

While Ned and Joshua escort the group to the stockade, you follow unnoticed in the cover of the trees. You observe Bacle lagging slightly behind the others and wonder what he's up to. Just as the party reaches the log prison, the crazy scientist shoves tipsy Ned off balance and dashes away in the darkness. Before your friends can make a similar move, the stockade guards take charge. Caesar, Bevatron, and Peckinpaw are herded inside the stockade, and the heavy wooden doors are slammed shut.

You have a fairly good idea where Bacle is going — to his bomb! Taking a shortcut through the woods, you reach the ammunition storehouse just in time to see him knock out the sentry and sneak inside. You position yourself by the window.

"Look, the meddling fools have done you a favor — the bomb has already been activated!" a thin, excited voice squeaks.

"Be cautious now, fellow. Check and see if you have enough time to reach the Egg before it blows. You wouldn't want to be scrambled all over the landscape, would you?" a deeper voice answers.

Who's Bacle talking to? Your stomach turns over. You had planned to try to overpower him and get the key, but there's no way you can handle two of them. You raise your head just enough to peek in the window.

Bacle is the only person in the storehouse! The poor guy's absolutely loony. He's

talking to himself — and worse than that, he's answering himself!

“Good, good, good, good, good!” Bacle crows, as he removes the key from the slot and examines a gauge on the side of the bomb. “It's a few minutes ahead of schedule, but that won't be a problem. Shall we go now, Bartholemew?”

Tell me how many minutes ahead of schedule, you urge him silently. But he doesn't cooperate.

“Not until you make sure nothing can go wrong, Bart,” he answers himself. “Swallow the key right now.”

Before you can move, Bacle pops the key into his mouth. You see his Adam's apple bobbing as the last hope for defusing the bomb goes down his throat.

At the door of the armory, the man pauses to scratch his head worriedly. “You know, Bartholemew, we must stop meeting like this. Someone might think that one of us is crazy!”

CHAPTER

10

Mission Day 02

South Slope of Mount Joy 8:13 P.M.

You think of and discard a dozen plans as you trail the insane scientist through the mountain underbrush. Capturing him won't do any good. Unless you're prepared to do stomach surgery on the man, the key's going to stay right where it is. You could try to move the bomb somewhere else. Jeremiah Peckinpaw's living room seems a good place — for a minute — but you know that's not practical.

Time. Time is your biggest problem.

When the solution hits you, it straightens you up so fast that a low branch smacks into your forehead. You hardly feel the pain.

“Time isn't the problem, it's the answer,” you mutter softly. “I could put the bomb in Bacle's Egg and send it back where it can't do any harm!” The image of the tyrannosaurus brings a wide grin to your cold face.

First things first. You have to find the BRUTE time machine before you can use it, and Bacle is your only link to its location. Your heart thuds wildly as you scan the snowy terrain. If you've lost him . . .

No. There he is by an outcropping of rocks, a dark splotch against the snow. *Good thing the moon is full so you can see him clearly*, you think, scrambling closer. You've got to jump him after he uncovers the machine, but before he can get in. You tense as he digs into a snowbank, exposing the gleam of metal.

One more minute, you tell yourself as the vehicle's dome comes into sight. Wait till he gets to the hatch — NOW!

"Lookee here, lads." A booming voice splits the quiet. "Is it buried treasure we've come upon? Old Jerry will reward us right proper when we take him this thing."

It's a good thing your reflexes are quick. If you hadn't stopped your leap in time, you would've landed right in the center of a circle of Peckinpaw's guards.

"Let me go, you fool," Bacle screams as the scarfaced guard you met before canters over on his horse and grabs the scientist's arm. "I'm on a mission for General Washington!"

"I don't give a fig for Washington. We ain't no Patriots here."

"Good. Good. You see, I really work for His Majesty, King George!"

Scarface snorts. "We don't care who pays

you. Tie him up good, boys. We don't want him to get away like them others."

You watch helplessly as the riders dig out Bacle's time machine and tie it to a sled.

"We'll take it over to Windy Bluff for now — leave it right in old Jerry's front yard," Scarface directs. "And put the prisoner in the smokehouse till Peckinpaw gits back."

"Please, you don't understand," Bacle blubbers. "There's a bomb set to go off in the Continental camp at 11:17. It'll kill everybody within two miles."

"All the better for us," Scarface cackles. "When the dust clears, the Society of Brutus will go in and pick up the pieces!"

As you watch them go, you know your last chance is now on the way to Mount Misery. You did pick up one vital piece of information though — the exact time you're due to be blown up!

Your feet should be flying through the snow, instead of dragging. There's so much to do — get the rest of the ACT members out of the stockade, get the bomb in the Egg, start the trip back by 12:35 A.M. — but for the first time in your life, you feel defeated.

"Why so glum, young soldier? May I be of help?"

You're so deep in misery that you haven't noticed the tall figure approaching through the trees. A bright shaft of moonlight illuminates his familiar features.

“I — I th-thought your hair was w-white, not b-brown,” is all you can think of to say.

His laugh booms into the air. “You speak of the powdered wig that custom says I must wear,” he answers. His grave eyes search your face. “Share the burden you carry so heavily.”

“I’m w-worried about my friends, General. I’m a long w-way from home, and it seems like there’s too much to do.” You swallow down the sudden lump in your throat.

The general absently snaps a piece from a bare branch of a nearby bush. “Remember how it was last August when we paraded in triumph through the streets of Philadelphia? Our spirits were as fresh as the twigs we wore in our hats.” He raises your chin until your eyes meet his. “You are the future of this nation. This winter is the hardest you will ever face — but know that spring *will* come. Hope, like the leaves, will grow green again.”

He tucks the small branch in your cap, and walks off into the darkness.

For a split second, you’re tempted to run after him — one word from Washington would free your friends instantly — but you know you can’t ask for his help. If you told him your strange story, he would think you were deranged or sick, or both.

Sick! That’s it. It’s going to be easy for you to get into the stockade and free the other members of your team. All you need is a little luck and your grape sour balls!

Retrieving the candy from its hiding place in your canteen, you pop two of them into your mouth and race back toward the camp.

Bam! Bam! Bam! Your fists beat against the heavy wooden door of the stockade.

“Who the — ?” As the guard peers through the small, barred opening at you, his face changes from irritated to wary. “What is it you want?”

“Got to see the sawbones,” you gasp, rolling your eyeballs way back in your head. You clutch at your throat and drop to your knees. “Cap’n Ethan sent me. Please hurry!”

— “That there’s Orion,” Ned says. “Got clean away when we captured the others. Open up the door.”

When you stagger into the guard room, you notice that Ned has been sampling his medicine heavily. What’s even better, he’s apparently shared it with the other soldiers.

Now you really go into your act. “*Aarrgh! Yechth! Gurrge!*” You let your arms flop like a scarecrow in a hurricane.

“Better get the doc — quick,” Ned slurs.

The other guards start to back away from you, speeding up their movements when your mouth flies open and your tongue bulges out. The sour balls have done their work. Your tongue is a sickly shade of purple.

When you open your eyes, Caesar is kneeling over you. His jaws are working hard to control a grin. “It’s a bad case all right —

Ned, we've got to get this soldier out of camp before the infection spreads," he says gravely.

"I don't know, Doc. Cap'n Ethan said—"

Caesar stands up slowly. "Look, Ned. The medicine I gave you and the rest of the squad will protect you — for now — but I don't have any more, and if you're exposed again after it wears off. . . ." The ACT leader's voice trails off meaningfully.

"Take him and welcome," the soldier says. Nervous sweat dots his forehead.

"What about the others? They may be a threat, too. I didn't give them as much medicine as I gave you," Caesar presses.

"The whole bunch of you can leave, for all I care. We ain't had nothin' but trouble since you joined up!"

That's all there is to it. In an instant the whole team is free and making the short trip to the ammunition storehouse — and the bomb!

"Sending the bomb back to the age of the dinosaurs is a stroke of genius," Bevatron tells you as she carefully picks up the bomb. "There were earthquakes and volcano eruptions all during that period — an explosion the size our bomb will produce won't do as much harm there as it would anywhere else."

Peckinpaw stirs impatiently. "Let's just get on with this, shall we?" He and Caesar are carrying the bomb between them on a makeshift stretcher. "At this rate, we'll never get this thing up the mountain to Windy Bluff."

“Quit bellyaching, will you? At least you’re not in jail anymore,” Hot Wheels reminds him irritably. “But you’re right — carrying the bomb on foot is slowing us down. If we’re gonna make it up Mount Misery in time, we gotta have wheels,” H.W. says.

“You’re in charge of transport, aren’t you?” Caesar says. “See to it.”

“Right, chief.” As H.W. hurries off through the underbrush, his shoulders are slumping a little. You wonder if he’ll ever get the promotion he wants so badly. But you have faith in good old Hot Wheels.

While you wait, you finally have a few minutes to take a good look at the bomb. You know there’s no chance to defuse it, but maybe there’s something else you can do. What you see turns your blood icy cold.

“Bev, come here. Something’s gone wrong. Isn’t this meter supposed to count off the minutes until the thing blows? According to what Bacle says, we should have about 65 minutes until 11:17.”

“Right,” Bev says.

“But look — the counter is running much too fast! At this rate, it will go off in less than five minutes! Something must have happened to it when we moved the bomb!”

“Can you do anything?” Caesar asks as calmly as possible — considering the fact that you are all about to be blown off the face of the earth!

CHAPTER

11

You stare at the bomb. There are 25 dials on it. You know from the first time you examined the bomb that you can't put the clock forward to give yourself more time. But maybe there's a way to fix the malfunctioning counter to at least get you back the hour you lost.

Working faster than you ever worked before, you hook your micro into the computer memory and study the display.

Type the following program into your computer. Lines 200 and 220 must each be typed as one line.

This program allows Orion to reset the clock on the bomb to give ACT more time. Orion must use a probe on any of the 25 lettered switches on the bomb control panel. The timing will be reset when the probe touches the secret switch. Unfortunately, there is a tampering mechanism on the bomb that will explode the bomb if five or more unsuccessful tries

are made to change the setting. The probe will indicate how far from the real switch it is, but not the direction. Diagonals count as two units. Place your probe by typing in the letter on the dial you choose and GOOD LUCK!

PROGRAM 5

```
10 REM BOMB RESET
20 T = 5
30 Y0 = INT(RND(1) * 5) + 1
40 X0 = INT(RND (1) * 5) + 1
50 PRINT "PROBE CORRECT SWITCH"
60 PRINT "DIAGONALS COUNT AS 2 UNITS"
70 PRINT
80 GOSUB 260
90 PRINT "WHICH SWITCH";
100 INPUT G$
110 L = ASC(G$) - ASC("A")
120 Y = INT(L / 5) + 1
130 X = L - INT(L / 5) * 5 + 1
140 D = ABS(Y0 - Y) + ABS(X0 - X)
150 IF D = 0 THEN 240
160 PRINT G$;" IS ";D;" UNITS AWAY"
170 PRINT
180 T = T - 1
190 IF T > 0 THEN 80
200 PRINT "TOO BAD..THE BOMB
      EXPLODED"
210 PRINT "THE CORRECT SWITCH WAS ";
220 PRINT CHR$(Y0 * 5 - 5 + X0 +
      ASC("A") - 1)
```



```

230 END
240 PRINT "BOMB TIMER RESET"
250 END
260 PRINT
270 PRINT "_____"
280 PRINT "! A B C D E !"
290 PRINT "! F G H I J !"
300 PRINT "! K L M N O !"
310 PRINT "! P Q R S T !"
320 PRINT "! U V W X Y !"
330 PRINT "_____"
340 PRINT
350 RETURN

```

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	IIe	TRS-80	Color	64	VIC-20	99/4A	400/800
	✓	✓						

This program will run on the Apple II+ and the Apple IIe. See the Reference Manual, page 124, for changes for other computers.

Bev hugs you and cheers as the counter slows to its normal pace. There's so much excitement that no one even notices H.W. clearing the bend with a mule-drawn sled.

"It's not a Rolls-Royce, but hop in," H.W. says proudly.

Caesar and Peckinpaw settle the bomb in the center of the sled.

“Good deal! Orion, program a count-down into your computer. We’ll need to know exactly how much time we’re working with.”

“Already done, chief.” Right on cue, your canteen lets out a sharp *beep*. “We’ve got almost an hour before it blows,” you tell the ACT leader, smiling at Bev. Fifty minutes seems like a good long time — now.

“I’ll be glad when Bacle’s back in the 20th century,” Bev whispers. “No telling how much harm he’d do if he stayed here.”

“Anybody figured out how we’re gonna get him back?” Hot Wheels asks as he urges the mule to a faster pace. “His time machine will be gone, and ours only holds five.”

“That’s what I was just thinking about,” Caesar says. “We’ll just have to strip the ship to compensate for Bacle’s weight. Since we only have until 12:35, the only sensible thing for us to do is split up. Hot Wheels and I will see to Bacle and the ACT time machine. You three get over to Windy Bluff and put the bomb into Bacle’s machine.”

“Peckinpaw, you put on that velvet get-up you stole from your ancestor as soon as you get a chance. You can divert the guards while . . . What is the problem, Orion?”

“I hear something back there in the woods,” you tell him.

“So do I,” he groans. “Sounds like a

squad coming up fast from Valley Forge. You'll be sitting ducks if you keep to the road. Get rid of the sled. H.W. and I will lead the soldiers away from you three. No matter what, the bomb comes first," Caesar says tersely. "And if for some reason we're not back at our time machine before 12:35, you've got to take off without us." As Bevatron starts to protest, he adds, "That's a direct order."

"Won't get any argument from me," Peckinpaw mutters, lifting the bomb gingerly.

As you trail Bev and Peckinpaw up the slippery, snow-covered slope, your canteen's *beep* lets you know that 45 minutes remain.

The trek over the densely wooded mountain where Jeremiah's mansion sits perched like a vulture seems to last forever. You take a turn carrying the bomb while Peckinpaw ducks behind a tree for a quick change.

Long before you're ready to hear it, another *beep* comes from your computer.

"Half hour to go," you tell Bev, suddenly feeling every ounce of the metal globe's 25-pound weight. "I've set it to alarm every four minutes from now until zero minus two. After that, it ticks off the seconds."

"Don't worry — it won't get that far," Bevatron responds confidently as Peckinpaw rejoins you. Giving him a quick once-over, she shakes her head in amazement. "I just can't believe how much you're like your great-great-grandfather," she tells him.

“I’m nowhere near as mean,” Peckinpaw says. “We’d all better pray that he’s still in Philly, or this could turn into a very bad farce.”

“Yeah, with a bang-up ending,” you add.

By the time you finally reach the boxwood hedge that surrounds the Windy Bluff stronghold, only 14 more minutes remain in the countdown.

“The Society of Brutus is about to have an unscheduled meeting. I’ll take the guards in the house and keep them occupied as long as I can — but don’t dawdle,” Peckinpaw says.

The thugs who captured Bacle are whooping it up around a fire by the sentry box. You can tell by the loud cackles and rough backslapping that the brown jug they’re passing from hand to hand has made more than a few rounds. The flickering light from the flames dances over the gleaming metal skin of Bacle’s Egg.

You and Bevatron crouch behind the thicket, watching Jeremiah’s imposter stride purposefully across the lawn toward his surprised underlings. With a barrage of curses and well-aimed kicks, Peckinpaw herds the disorganized drunks into the mansion.

“We’re almost home free. I never thought it’d be this easy,” you chortle when the coast is clear.

“Don’t break out the champagne yet,” Bevatron warns, hoisting the bomb and heading for the BRUTE time machine.

You can't see why she's worried — stashing the deadly cargo behind the driver's seat takes only two of the ten precious minutes you have left.

Gingerly, you ease in front of the console and examine the control panel. Relief washes over you. The mechanism is similar to the one that guides the ACT machine.

"Any problems?" Bevatron's voice is tight with tension.

"Nope — piece of cake," you tell her as you start up the machine.

"I speeded up the time function so the trip back will be almost instantaneous. Now all I have to do is mash the 'activate' button, and she's on her way," you call to Bevatron.

"The only thing you can look forward to mashing is the dirt at the bottom of your grave," a sinister baritone informs you.

You turn to find Peckinpaw standing beside the open door of the time machine. What is he up to now? He has Bev in a choke-hold, and the pistol in his right hand is no more than three feet from your head.

"Will you quit fooling around? I gotta get outta this thing!"

Beep . . . beep . . . beep . . .

"C'mon, man, put that thing down. We've only got two more minutes," you say.

"You young whelp! I will have your hide tanned to make boots for my servants. Do you know to whom you are speaking?"

Whoops! You just figured it out. It's the real Jeremiah Peckinpaw!

“What is this contraption? Why is it sitting on my land? And where are my men? Answer me at once!”

You pick the part of his question that you can handle most easily. “They all went in the house,” you tell him. Your mind is working at top speed, but you can see no way out of this. The only thing you know for sure is that you must activate the time machine before the countdown runs out.

Beep . . . beep . . . beep . . . You try to push aside the thought that your canteen may be ticking off the final seconds of your life.

“What's that noise? Are you stupid enough to try to signal for help?” the elder Peckinpaw thunders.

Beep . . . beep . . . beep . . . Your mind automatically counts: *10 . . . 9 . . . 8 . . .*

You see the hammer of the pistol inch back as the man's finger tightens against the trigger. When you reach for the “activate” button, your hand trembles only a little. *Will going out in a nuclear blast be quicker than a bullet through the brain?* you wonder.

CHAPTER

12

**Mission Day 02 Society of Brutus
Headquarters 11:16:54 P.M.**

“There he is — that’s the slimy swamp scum who’s been impersonating me! Capture the scoundrel, but don’t hurt him. I want the pleasure of killing the blackguard myself!”

The shout coming from the steps of the mansion distracts Jeremiah’s attention for a split second. You hit the time machine’s start button and dive through the door.

In the same instant, Bevatron’s elbow slams against Jeremiah’s ribs. His pistol discharges harmlessly into the ground as he doubles up with a breathless *whoosh*.

Behind you, the BRUTE time machine vibrates in the center of an eerie glow. You catch the faint scent of sulphur as it disappears with a loud *pop*.

The next minute passes like a slow-motion sequence from a scary movie. A bolt of lightning rips through the clear night sky, touching every detail of the snowy landscape with an unearthly green fire. More terrifying than the boom of a thousand cannons, a clap of thunder follows. You swallow hard, not knowing whether the sudden shaking you feel is coming from the ground beneath you or the thudding of your own heart. Then it is over. Aside from a ragged crack zigzagging along the ground near the Windy Bluff mansion there is no sign that anything has happened.

The two Peckinpaws stand face to face — one's mouth is open in amazement while the other wears an apologetic grin.

“Sorry I have to do this, old boy, but I've got no choice,” Nathaniel mutters in a tone too low for the guards to hear.

Before Jeremiah can react, the BRUTE director slams him with a right that lands squarely on the point of his chin. As the senior Peckinpaw sags like a sack of potatoes, his great-great-grandson catches him and lowers him gently to the ground. “Take this man to my den, you sniveling dogs — and if you harm one hair on his head, I'll have the lot of you flogged. I'll see to these others myself,” he commands the stupified stooges. “Well, what are you waiting for? Move!”

You have to hide a grin as you watch Jeremiah's underlings scurry away. If they think

they're on shaky ground now, wait till they see what happens when the boss wakes up!

“That little maneuver bought us 20 minutes — tops. Jeremiah won't remain unconscious for very long, and he'll be furious when he comes to. Let's head down to the smokehouse and see if Bacle's there,” the BRUTE director snaps.

With every stride you take, your ears are alert for the sound of someone following. But except for a hoot from an owl, nothing disturbs the clear night air. And when you get to the smokehouse, you can see it's empty.

“Maybe Caesar beat us to him — let's head back to our time machine,” Bev says. “What time is it?”

Quickly, you consult your canteen. “11:28 on the head,” you say cheerfully. “I bet we set a world's record getting back here.” The mission has been accomplished and there's still more than an hour before the team's take-off deadline. But one glance at the moonlit clearing marches your parade right through the center of a cloudburst — three British soldiers are having a heated discussion in front of the fake toolshed where the time machine is hidden! You recognize one as Major Bacle.

“What are they doing here?” Peckinpaw asks with disgust. “They're supposed to be raiding the Patriots' camp tonight.”

“Doesn't look as if they're going anywhere,” Bevatron observes.

"I bet our Bacle got to them and warned them to stay away from the camp, because of the bomb. What was supposed to happen, anyway?" you ask Peckinpaw.

The BRUTE director frowns. "The way my mother tells it, Jeremiah and his men found Bacle dressed in a British uniform. A Continental patrol was nearby — mere coincidence, of course — and Bacle was caught and disgraced. Jeremiah, of course, was awarded for his valor in stopping the raid." He stops suddenly, his face dark with gloom. "But now it won't happen. So Jeremiah will never get to be known as a great patriot."

You're only half listening to the conversation. A noise coming from behind claims your attention. "Does anybody hear —"

There is definitely someone approaching. Bacle and his men hear it, too.

"Who's that?" Bacle asks.

"Sounds like horsemen. We better go see," one of the others replies.

"I'll wait here. In case it's a trick, I can go for help," Bacle offers nervously.

"No, sir," another Tory soldier pipes up. "You come with us. We wouldn't want you to run off, now would we?"

Bacle reluctantly follows the men. The few minutes they're gone gives you enough time to run to the shed and jump inside. You reach the entrance first, but a small voice tells you to be cautious. Your instincts are absolutely correct,

because as the door creaks open, a broken ax handle swishes through the air not three inches from your nose! Without thinking, you dive at your attacker.

Peckinpaw and Bevatron jump on the pile, and from somewhere near the bottom, a stifled voice says, "Okay — you got me!"

"Hot Wheels! It's only us," Bev exclaims, untangling herself from the heap and kicking the door closed. She switches on her powder horn flashlight, illuminating the pitch-black interior of the shed.

"Where's Caesar?" you ask. "Did he get Bacle?"

"The last time I saw the boss, he was chasing Bacle through the woods near Windy Bluff," the driver reports gloomily.

Bevatron's face betrays her dismay. "Not a trace. What happened?"

"We had him, but then we ran into some of Ethan's men. We had to hide and Bacle just got away in the confusion." Hot Wheels shakes his head before continuing.

"We figured he'd go straight for the Egg, so Caesar told me to take care of our time machine while he headed out after Bacle."

"You certainly have done a good job — everything's just as we left it," Peckinpaw sneers sarcastically, peering into the vehicle. "Weren't you supposed to strip the inside to compensate for Bacle's extra weight?"

H.W.'s face darkens with an angry flush.

"I just got here. And anyhow, I'm not taking out a single bolt until I consult with Orion."

"What's the problem, Hot Wheels?" you ask, reaching for your canteen automatically.

"The energy leak is more serious — " He stops suddenly, his attention riveted on the door latch. He moves quickly over beside the entrance. "Cut the light, Bev — someone's trying to get in!"

"Maybe it's Caesar. Hot Wheels, wait 15 seconds, then push the latch to the right — that unlocks it. When I give the signal, everybody grab whoever it is. We can ask questions later."

She switches off the light. You wait tensely in the sudden darkness, holding your breath as the wooden door creaks open.

The slight figure silhouetted in the door is definitely not the ACT leader.

"Now!" Bev calls out softly.

The intruder doesn't have a chance. He is whisked in, thrown down, and sat on before he can draw a breath. Bev turns on the light to reveal the man's terrified features.

"Well, if it isn't our mad scientist. Welcome, Professor Bacle," Peckinpaw says smoothly as he stoops to pick up a pistol Bacle dropped in the scuffle. He studies the gun casually before he tucks it in his belt.

"Don't let him hurt me, Bart," Bacle says to himself. "I was just following your orders — tell him I didn't mean to betray BRUTE." Right before your eyes, the man does

a Jekyll-Hyde switch. He pats himself on the back, crooning, "There, there, it's all right, Bartholemew — we'll build another Egg, I promise you. Then we'll come back. . . ." The incredible conversation tapers off to a moan as Bacle buries his head in his hands.

"He'll probably be in an institution for the rest of his life, but at least he's not a threat to us anymore." Bevatron shakes her head.

"Tie him up, anyway," Peckinpaw says.

"Now what about the energy problem, Hot Wheels?" you prompt.

"Like I was telling you, the power's lower than we thought. I've got to know how much we need to strip out of the ship to get us all back." He hands you a paper he's torn out of the vehicle's manual. "Here's what everything weighs and I've marked all the unnecessary stuff — can you tell me what's got to go?"

"Bacle weighs about 130 pounds, wouldn't you say?"

Hot Wheels nods his head in agreement.

You retrieve your canteen and get to work.

Type the following program into your computer and run the program. Make your best estimates of how much weight you need to remove. Remove too much weight and the ship will zoom into the future. Remove too little and you'll be trapped in the past. Lines 40,80,90,110,140, and 210 must each be typed as one line.

PROGRAM 6

```
10 REM PROGRAM THE TIME MACHINE
20 PRINT "REMOVE THE EXACT"
30 PRINT "WEIGHT TO GET THE"
40 PRINT "TIME MACHINE BACK TO THE
  PRESENT"
50 DATA 6,.3 ,.012,3400,1000
60 READ A,B,E,T,W
70 PRINT
80 PRINT "DISTANCE LOCKED AT ";A;
  " MILES"
90 PRINT "YOU HAVE ";W;" LBS OF
  CARGO"
100 PRINT
110 PRINT "HOW MUCH WEIGHT WILL YOU
  REMOVE";
120 INPUT C
130 IF C < W THEN 170
140 PRINT "YOU CRAZY? YOU CAN'T DO
  THAT!"
150 PRINT
160 GOTO 80
170 C = W - C
180 D = (T - (A * B * C)) / (E * C)
190 PRINT
200 PRINT "* WITH ";C;" LBS OF CARGO"
210 PRINT "YOU WILL END UP IN YEAR ";
  INT(1777 + D)
220 PRINT
230 PRINT "TRY AGAIN (Y/N)";
240 INPUT Y$
```

250 IF Y\$ = "Y" THEN 80
260 END

IBM	Apple		Radio Shack		Commodore		TI	Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	99/4A	400/800
✓	✓	✓	✓	✓	✓	✓	✓	

This program will run on all computers in the chart above. Check the Reference Manual, page 125, for changes for the Atari.

You feel sick as you look at the answer.

“What is it, Orion?” Bevatron must sense that something is terribly wrong, because her dark eyes are filled with dread.

You say it as gently as you can. “No matter how much we strip this machine, we’re still going to be overweight.”

“That means someone will have to be left behind, now doesn’t it?” Peckinpaw muses. A sudden craftiness comes into his face — his next words fill you with foreboding. “Shall we draw straws for the honor, or do we just agree right now that Caesar is odd man out?”

“Right now we don’t do anything but strip this vehicle. Give me a hand. It shouldn’t take us more than 15 minutes,” H.W. says.

“I say we take off as soon as this is finished,” Peckinpaw grunts, straining to wrest a stubborn bolt from the last seat. “Why risk being trapped in time?”

“You’re outvoted three to one. We’re not leaving one second before we have to.” Hot Wheels tightens his grip on the wrench he’s holding. “And don’t try any funny business — remember, you need us more than we need you.”

“Don’t threaten me, you mental midget,” Peckinpaw growls.

The two men face each other menacingly, but the confrontation is unexpectedly interrupted by the mad scientist. “Bart could help Nathaniel Peckinpaw if he wanted to, couldn’t you, Bart?” he asks himself. “Sure. I can run the ACT time machine. Let me go — and Bartholemew, Peckinpaw, and I can take a quick spin back home.”

The BRUTE director lifts an eyebrow as though he’s considering the possibility, then shakes his head ruefully. “After all we’ve been through together, it would be uncivilized for me to leave you people in the lurch.” He casually pulls open his velvet coat and fingers the butt of the pistol he stuck in his belt. “On the other hand, someone obviously needs to take charge in Caesar’s absence. Consider me your new leader!”

“Forget it!” Hot Wheels roars.

Bevatron lays a restraining hand on the

driver's sleeve. "Your concern for our welfare is touching, Peckinpaw, but it's a joke! You don't consider us a threat to your organization, so you can afford to be generous, but getting rid of Caesar permanently would be a big boost for BRUTE, wouldn't it?"

"I'm hurt by your lack of faith in me! I'm willing to give your precious Caesar every reasonable chance to return — just don't press me." Peckinpaw leans casually against the side of the time machine. You notice that his hand still rests on the pistol he took from the crazy inventor. "Now this isn't an order — it's a suggestion," Peckinpaw says sarcastically. "But don't you think we should monitor the situation outside? Who'll volunteer to slip out and keep tabs on the Tories?"

"Not necessary," Bevatron answers, pressing a hidden lever on the wall of the shed.

You take a step backward as the surface just melts into a clear glass window!

"Take it easy. . . . Nobody can tell anything's happening in here. This wall is like a one-way mirror," Bev assures you.

The Tories are returning to their places, and you can hear their grumbling clearly.

"I don't like it. . . . I don't like it at all," Major Bacle mutters as he resumes his seat on a stump beside the shed. "This night is full of strangeness. First that strange man telling us not to go through with the raid, then the lightning. I tell you this whole business is touched

with evil." His plump shoulders shake with a sudden shiver. "What time is it, Shankshaw? Maybe Peckinpaw won't come."

"It's quarter past midnight," one of his companions replies testily. "And I wish you'd stop being so frightened of Peckinpaw. He will have to understand why we called off the raid. We couldn't risk taking the men into that pest-hole, could we?"

The third Tory runs a nervous hand over his scraggly beard. "Old Jerry's a mighty hard man, but he's not totally unreasonable. If we just explain. . . ." The sound of approaching horses cuts him off. His face goes ashen as Jeremiah Peckinpaw and four of his guards ride in through the trees.

The BRUTE director comes up behind you and looks out with great interest.

By now the horsemen are so close to the shed you can see steam coming from Lucifer's nostrils. Jeremiah's big bay paws the ground restlessly. His eyes, like those of his owner, seem to glitter with fury.

"Forgive my tardiness," the President of the Society of Brutus says with a slight bow toward Major Bacle. "May I be the first to give you gentlemen my congratulations? Now tell me — how went the raid on Valley Forge?"

The Tories start to edge backward, leaving Major Bacle cringing alone in the lime-light. "Well, er . . . we, uh . . . I mean . . ." he sputters uselessly.

Jeremiah's face twists into a mask of fury. "Don't waste your breath on lies! I have been informed of your treachery."

Giving up all pretense of bravery, the major's red-coated men run for the woods.

"After them! They could meet with a serious accident in the dark of the forest," Jeremiah orders his guards. Turning back to the confused Tory leader, he draws his pistol. "And you, my fake lobsterback, must leave this vale of tears. I'll not leave any dangling ends to cause me trouble later."

"We can't just sit in here and watch that man get killed!" Hot Wheels shouts.

But the timely entrance of Captain Ethan and a squad of Patriot soldiers makes the ACT driver's interference unnecessary.

"Hold up, there!" the captain orders, as he and his men storm into the clearing.

You quickly scan the crowd to see if they've got Caesar, but he's not with them.

"We got 'em this time, boys," Ethan roars, charging up to the shed. At the sight of Peckinpaw, he stops short, his face a mirror of confusion. "Beg pardon, sir. We was chasin' down some Tory spies that snuck into camp. Have you seen six strangers hereabouts?"

"Even as we speak, my men are rounding them up," the elder Peckinpaw responds smoothly. "But see here, I have bigger game for you. This is their leader!" He points his whip accusingly at Major Bacle. "I was just

on my way to report a dastardly Tory plot to the general. This man and his friends were going to attack tonight as you slept shivering in your miserable huts.”

“Don’t listen to him — it was all his idea!” Major Bacle screams. “He’s the President of the Society of Brutus.”

“This is the second time I heard that bit of news tonight,” Ethan says, giving Jeremiah a suspicious glare.

“After all I’ve done for the Patriot cause, surely you can’t believe this idiot’s slanderous charge.” Peckinpaw’s tone is shocked.

Ethan scratches his stubbly chin thoughtfully. “Well, we *did* appreciate them sacks of flour you sent over last week. . . .”

You want to burst out of the shed and tell Ethan the real story, but you know he’d never believe you. A stir behind you takes your attention from the drama outside. Peckinpaw springs to his feet, drawing his weapon.

“That’s all I need to hear,” the BRUTE director says triumphantly. “Into the time machine, all of you. Since history remains unchanged, there’s no further need to wait. Jeremiah will be a hero after all!”

The ACT team stands firm. Hot Wheels is the first to voice the unspoken agreement among you. “Go ahead, leave — and good riddance! We’re waiting for Caesar.”

“Very well. You dreary drones can spend the rest of your useless lives in this mess if you

choose to — I'll just take Bacle up on his kind offer." Nathaniel jerks the scientist to his feet and shoves him into the time machine. "Stay back — I'll put a bullet in the first one who tries to stop me!"

When none of you move, he hesitates, staring at you with a mixture of dismay and puzzlement. "I'll give you one more chance to come with us. Why stay here and face certain doom?"

No one speaks.

"There's no reasoning with fools. All right, we'll wait five minutes — not a second more," he mutters, throwing the pistol down in disgust. As he glances over at you, the hint of a wry smile plays about his lips. "You and your computer had better come up with an instant diet, Orion. We're still 30 pounds overweight, remember?"

The idea that's been teasing you comes close enough for you to grab. "H.W., how much does the guidance system weigh?" you ask.

"Fifty pounds, give or take a few — what's the difference? Without the controls, we can't move an inch."

"We don't need them — we've got this!" you tell him, waving the canteen computer under his nose. "It weighs less than a pound, and if we can rig a hookup, it'll do just as well."

"What've we got to lose? Let's get cracking!" Hot Wheels lifts you in a bear hug that threatens to crack your ribs.

“Before you get too jubilant, have you forgotten about your fearless leader? No need to go to the trouble if he’s not going to show,” Peckinpaw points out. “Even if he’s close by, how’s he going to get through that crowd?”

You stop disconnecting the controls long enough for a peek at the observation port. The BRUTE director’s right — Jeremiah, Ethan, and the rest of the cast show no signs of moving away from the shed.

“Leave it to me.” Bevatron retrieves a gadget from her bag. It looks like a megaphone. She blows hard into it, and from outside you hear a sound like an approaching tornado. You are watching her mouth move, but her rich alto comes at you from across the clearing. “Great Caesar’s ghost, we’ve got the whole bunch holed up in one place,” she says. “Mr. Peckinpaw, quick — over here!”

All heads outside swivel in her direction.

“Look at them scramble! A little jolt from the other side ought to do the trick.” Bev grins as she switches the transmitter to another circuit.

“Can you hear us, boss?” The question holds a note of desperation. “We captured the crazy one, too, but we need you to come tell us what to do with him.”

Turning his horse, Jeremiah plunges into the thicket. Ethan’s squad follows, leaving Major Bacle the unexpected chance to escape. He doesn’t waste a single second.

“If the chief’s anywhere around, he had to get the message,” Hot Wheels says tensely. “It’s 12:33 — get ready to move. Orion, you got the new system hooked up yet?”

“Working on the last connection,” you answer. “Any sign of Caesar?”

Bev shakes her head gloomily. “Not a trace. Wait! Look over there by the smoke-house! H.W., did you see something move?”

Hot Wheels grabs the transmitter from Bevatron’s hand. “Allee, allee, in free!” he yells at the top of his lungs.

Caesar gets the message, but unfortunately, so do a couple of Ethan’s men who have been straggling behind. As the ACT leader starts his mad dash for the shed, they turn and cock their muskets.

You see the belch of flames from the muzzles of the guns, then Caesar falls to the ground.

“Wait! He’s not hit — he just fell down,” Bevatron calls out with relief.

“Clumsy oaf!” Peckinpaw spits out, sprinting for the door. Before any of you can react, the BRUTE director has reached Caesar’s side and is hauling him up.

“I don’t believe what I’m seeing,” Bevatron gasps. “Is he actually — ”

The boom of another round from the Patriots’ guns cuts her short. This time there is a casualty — Nathaniel Peckinpaw grasps his chest and sinks to the ground.

By now, the whole squad is coming back

through the trees. Without the slightest hesitation, the ACT leader swings the BRUTE director across his shoulders. Weaving and dodging through the musket balls, he staggers up to the door of the shed with his load.

The next few seconds are not easy to sort out — the mad scramble for the time machine, the thump of musket butts hitting the sides of the shed, Ethan's angry shouting — everything blends together in a frenzied mess.

Frantically, you reach for the canteen, keying in the sequence that controls the shield. It glides smoothly into place and you can breathe again — nothing can breach the security system you've just activated.

"What time is it?" Peckinpaw asks. His voice sounds shaky, but okay.

"12:34." You give him a worried look. In spite of everything, you've grown to like the man.

"It's just a scratch — for the love of BRUTE, would you watch what you're doing, Orion?" he growls at you.

"Wait." Caesar's calm voice stops you from starting the time machine. "H.W., start her up. You've more than earned your promotion," the ACT leader says with a grin. "Mr. Director of Transport, take us home!"

If you have been able to save Program 3, run it now. Put in the current year and your destination. If you couldn't save it, input it again. You'll find it on page 24. Bon voyage!

EPILOGUE

Mission Day 01 ACT Headquarters 11:03 A.M.

The autumn air smells sweet as you step out of the time machine. One glance at the familiar banner fluttering proudly over the ACT building reassures you — all the stars and stripes are still there!

You wonder who owns the sleek chrome helicopter parked in the driveway. Your curiosity is soon satisfied.

“Forgive me if I rush off, but I mustn’t keep my ride waiting,” Peckinpaw announces with a curt nod to all of you. “I can’t say that it’s been fun, but it has been interesting.”

Caesar takes a step toward the BRUTE director, hesitating and then extending his hand. “Thanks for saving my skin back there,” he says. “You were a real asset.”

“Let’s not get sentimental — the way I

see it, we're even." Peckinpaw ignores the offer of a handshake. "The truce is now over. You can expect to hear from me very soon."

"ACT will be ready for anything you can dream up — BRUTE hasn't won a round yet."

The leaders of two of the most powerful organizations on Earth measure each other grimly. Nathaniel Peckinpaw breaks the contact. Spinning on his heel, he heads for the shiny car. Just before it pulls off, he rolls down the rear window and sticks his head out. "We really should have lunch sometime," he calls.

"Let's go in and get these disguises off," Hot Wheels says. "I can't take you back to school looking like a Continental soldier."

There's still one last thread you have to tie up. "Bev, what about all that stuff we left behind — the seats and controls from the time machine, the transmitters — won't they change history just by *being* there?"

"No. They're not there anymore — they self-destructed. Every trace was gone 15 minutes after we left." She leans over and plants a quick kiss on your cheek. "You're really good, Orion. Good luck on that history exam."

You reach up to touch the crumbling twig that Washington gave you. It's still tucked in your cap and the face of the man who put it there flashes through your mind. "I don't think I'm going to need luck," you say, smiling. "I've got something much better."

REFERENCE MANUAL

Note to User: The programming activities in this book have been designed for use with the BASIC programming language on the IBM PC, PCjr, Apple II Plus or Apple IIe (with Applesoft BASIC), Commodore 64, VIC-20, TI 99/4A, Atari 400/800, Radio Shack TRS 80 Level 2 or greater, and the Radio Shack Color Computer. Each machine has its own operating procedures for starting up BASIC. So make sure you're in BASIC before trying to run any of these programs.*

The version of the program included in the text will generally run on most of the computers listed above. However, a few of the commands used are not available on some home systems. If the program as given does not run

*Also make sure you type NEW before entering each program to clear out any leftovers from previous activities.

on one of the micros listed above, modification instructions will be included in this Reference Manual. TI 99/4A users, please note: The Texas Instruments version of regular BASIC doesn't allow multiple statements on a line or the word GOTO following a THEN. Multiple statements on the same line should be entered as one statement per line number and any THEN GOTO line number should be entered as just THEN line number.

Even if you're using a computer other than the ones mentioned, the programs may still work, since they are always written in the most general BASIC.

If you need help with one of the computer activities in the *Micro Adventure*, or want to understand how a program works, you'll find what you need in this manual.

Naturally, programs must be typed into your computer *exactly* as given. If the program should run on your computer but you're having problems, do a list on the program and check your typing before you try anything else. Even a misplaced comma or space might cause an error of syntax that will prevent the whole program from working.

TERMS YOU NEED TO KNOW

Computer experts have a special "language" they use when talking about programs. Here are some common terms that will

help you understand the explanations in this manual.

Arrays are groups of two or more logically related data elements in a program that have the same name. However, so that the individual elements in the array can be used, each is also identified by its own address (called an *index* by programmers). You can think of an array as an apartment building. One hundred people might live at the Northwest Apartments (or 100 pieces of information might be stored in the NW array). But each unit within the building has a number (like Apt 14), so that it can be located and receive mail. In the NW array, 14 could be the index to find a particular piece of information, and would be written NW (14). If you put the 26 letters of the alphabet into an array called Alpha, then Alpha (2) would equal B because B is the second letter of the alphabet.

ASCII (pronounced *asskee*) is the standard code used by most microcomputers to represent characters such as letters, numbers, and punctuation.

ASC is a function in BASIC that will supply a character's ASCII code. For example ASC("A") will give you the number 65.

Bugs are errors or mistakes in a program that

keep it from doing what it's supposed to do. Some of the programming activities in this book will ask you to find and fix a bug so that the program will work correctly.

Functions are ready-made routines that perform standard calculations in a program. It's sort of like having a key on a calculator that computes a square root or the cosine of a number. The programming language BASIC comes with a number of standard functions to perform certain tasks. For example, the function $SQR(x)$ will find the square root of any number when x is replaced by that number. You might want to check the BASIC manual that came with your computer to see which functions are available on your system.

INT is a function that changes any number that you supply into a whole number or integer. For example $INT(4.5)$ will return the value 4. For numbers greater than 0, INT just throws away any fractions and supplies you with the whole number.

Loops are sections of programs that may be repeated more than once — usually a specified number of times, or until certain conditions are met. For example, if you wanted to write a program that would count from 1 to 100, a loop could be used to keep adding 1 to a counter variable until the number 100 was

reached. Loops are most commonly formed with FOR/NEXT statements or GOTO commands. You'll find many examples of these in the programs in this book.

Random Number Generator This function, which is called RND in BASIC, lets you generate numbers at "random" just as though you were throwing a set of dice and didn't know which number was going to come up next. In most home computers, the RND function returns a fraction between 0 and 1. To get numbers in a larger range, the program must multiply the fraction by a larger number. For example, `RND * 10` will produce numbers between 0 and 10.

REM This command is used to tell the computer that whatever is on a particular line is just a comment or a remark and should not be executed. An example might look like this:

```
10 REM THIS PROGRAM COUNTS DOWN.
```

Variables are names used to represent values that will change during the course of a program. For example, a variable named D\$ might represent any day of the week. It may help you to think of a variable as a storage box, waiting to receive whatever information you want to put in. Variables that deal with strings of characters are always followed by a dollar sign. Variables that end in a percent sign always hold integers (whole numbers like 1, 2, 3, 500).

Variables with a pound sign or no special character at the end hold numbers that may contain fractions. The number of characters allowed in a variable name varies from computer to computer.

PROGRAM 1: DECODER

Modifications for Other Micros

Atari — Make these changes:

```
15 DIM B$(255),C$(1)
120 A=ASC(B$(I,I))
160 A=ASC(B$(I,I)) - ASC("A") + 1
```

TI-99/4A — Make these changes:

```
120 A=ASC(SEG$(B$,I,1))
160 A=ASC(SEG$(B$,I,1)) - ASC("A") + 1
```

What the Program Does

This is the decoder program that ACT uses to send Orion secret messages.

How the Program Works

It uses a secret number from 1 to 23 to decode the message. Any other number will leave the message scrambled. Be sure to use only capital letters!

Only the letters from A to Z are scrambled. The numbers and special characters like periods and commas are left alone.

Line 110 starts a loop that looks at each letter of the scrambled line. Line 120 extracts the letter. At line 160 the ASCII value of the character is *normalized*. That means that the value of A becomes 1 and the value of B becomes 2 and so on. This helps the program run on different computers.

In line 170 we add the secret number to the normalized value of the character and do a *modulo* (remainder) function to make sure that the number we end up with stays between 1 and 26. At the end of line 170 we add back the ASCII value of A so that we can print the character in line 180.

You can use this program to *encode* or *decode* messages. Here's how!

Run the program to encode a message. Use a number from 1 to 23 as the secret number. Now, to get the secret number to *decode* the message, just subtract the number you used to *encode* the message from 24. For example, if you used the number 17 to *encode* the message, you use $(24 - 17 = 7)$ the number 7 to *decode*.

PROGRAM 2: TRACER

Modifications for Other Micros

Atari — Make the following addition:

```
15 DIM A$(25),R$(25),C$(25),B$(25)
```

Make the following change:
Do NOT put quotes (') in the *data* statements in lines 30 through 70.

What the Program Does

This is the program Orion uses to trace Bacle by using the string of credit card receipts. Each receipt has a transaction number. Each transaction number represents an area office of the credit card company, and the city office within the region. Orion uses this information to get the computer to decode the transaction codes into English.

The areas are *north*, *south*, *east*, and *west*. They are in *data* statements in line 30. The city offices for each region are listed in *data* statements in lines 40 through 70.

The area office is extracted from the transaction code by dividing it by 100 (line 150). This represents the region. The remainder (line 220) is used to determine the city.

How the Program Works

The program works like this: For each transaction code, the program gets the number of the area, R. It then reads, from the beginning of the data, saving the name of the Rth area. A 2 would be *south*, A 4 *west*, etc.

The program then gets the city number, X, and reads through all the cities, saving the X-th city name. Finally, it prints the information in lines 280 through 320.

PROGRAM 3: TIME JUMP

Modifications for Other Micros

Atari — Make the following addition:

15 DIM P\$(50)

TI-99/4A — Make this change:

20 W=26

180 IF Y > = D THEN 190

185 T = 1

Radio Shack Color Computer — Make this change:

20 W=26

VIC-20 — Make this change:

20 W=20

Also, use “VF” instead of “VALLEY FORGE” when entering the place. (Valley Forge is too long to fit.)

What the Program Does

This is the program that Orion uses to control a time machine’s travel through space and time. (Really, it is just a fancy printing program; you might call it “special effects.”)

How the Program Works

There are five things that we must tell the program: the year we want to send the time machine, the place to send it, the year we are starting in, the speed we want to travel at, and finally the jump-span factor. The jump-span factor tells the computer how far the actual time machine is set to jump, with each *iteration* (a fancy word for *repeat*) controlled by the computer.

All those things are entered by *input* statements in lines 30 through 140.

What the program does is count back through the years, printing them as it does. Before printing each year, the program puts a varying number of spaces before the information. That is what gives the zigzag effect on the screen.

You might want to try changing the value in line 20 (the variable *W*) to something else and see what happens. That variable tells the program what width of a computer screen to expect. For the best results, make it two smaller than your screen line size.

PROGRAM 4: DEFUSE THE FORCE FIELD

Modifications for Other Micros

Atari — Make this change:

```
40 X1 = INT(RND(0)*(S-1))+1
```

TRS-80 — Make these changes:

30 S=62

40 X1=RND(S)

Commodore-64 — Make this change:

40 X1=INT(RND(-1)*(S-1))+1

VIC-20 — Make these changes:

20 S=20

40 X1=INT (RND(-1*(S-1))+1

Radio Shack Color Computer — Make these changes:

30 S=30

40 X1=RND(S)

IBM — Make these changes:

15 RANDOMIZE

30 S=78

40 X1=INT(RND*S)+1

TI-99/4A — Make these changes:

15 RANDOMIZE

30 S=26

40 X1=INT(RND*S)+1

What the Program Does

Orion uses this program to help defuse the force field around the nuclear device. Orion has an analog instrument that will give a meter reading of the switching frequency values needed to deactivate the force field. Three correct entries are needed to deactivate the

device. After five incorrect frequencies (values) are tried, the device will immediately explode, with disastrous results.

How the Program Works

The program prints a meter reading of the value from 1 to "S". A reading of 1 is at the left of the meter, and the highest reading is at the right end of the meter. The reading is shown as an asterisk (*). You must guess its exact position. Your guess will be shown as a carat (^) on the meter. You can guess until you get it right or die trying. You get five tries to guess three numbers. Each new number is shown by the asterisk appearing at a different place on the meter.

Since some microcomputers can print more information on a screen line than others, the variable S is used to indicate how wide each screen is. S is set to less than your screen width. The game is a bit easier when S is a small number.

The program assigns the value randomly, using the RANDOM function in line 40. It gets your guess in lines 80 and 90, and analyzes it in lines 110 to 140. That means you can play the game over and over again, because the right frequency will change.

The subroutines in lines 250 to 400 just print out the meter with the reading and your guess displayed.

PROGRAM 5: BOMB RESET

Modifications for Other Micros

Atari — Make these changes:

```
15 DIM G$(1)
30 Y0 = INT(RND(0)*5)+1
40 X0 = INT(RND(0)*5)+1
```

VIC-20 and Commodore-64 — Make these changes:

```
30 Y0=INT(RND(-1)*5)+1
40 X0=INT(RND(-1)*5)+1
```

IBM-PC and TI-99/4A — Make these changes:

```
15 RANDOMIZE
30 Y0=INT(RND*5)+1
40 X0=INT(RND*5)+1
```

TRS-80 and Radio Shack Color Computer —
Make these changes:

```
30 Y0=RND(5)
40 X0=RND(5)
```

What the Program Does

This program allows Orion to reset the clock on the bomb to give ACT more time. Orion must use a probe on any of 25 switches on the bomb control panel. The timing mechanism will be reset when the probe touches the secret switch. Unfortunately, there is a tampering mechanism on the bomb that will ex-

plode the bomb if five or more unsuccessful tries are made to change the setting. The probe will indicate how far from the real switch it is, but not in which direction. Diagonals count as two units.

How the Program Works

The program first randomly selects a secret position for the switch. This happens in lines 30 and 40. The switch name is *input* in lines 90 and 100. Line 110 *normalizes* the ASCII code value of the letter chosen. A becomes 1, B becomes 2, and so on. At lines 120 and 130, that value is converted into a column (X) and a row (Y) value. Line 140 figures out how far we are from the switch. If we found the switch, we print the message and end the program. Otherwise we print the distance away. If we have not used all five guesses, we go back to try again.

The subroutine at lines 260 through 350 print out the control panel switches to help us know where to probe.

PROGRAM 6: TIME MACHINE

Modifications for Other Micros

Atari — Add the following:

15 DIM Y\$(1)

What the Program Does

This program allows Orion to determine just how much weight to remove from the time machine to get back to the year from which the ACT team came.

Your task is to determine how much weight to remove. The program will help by telling you where the time machine will end up if you remove that amount of weight.

How the Program Works

The DATA in line 50 represents the miles the ship must travel, the amount of fuel required per pound per mile, a control value for calculations, the amount of fuel per year per pound, the amount of fuel on the ship, and the current weight of the ship.

Lines 110 to 120 get the amount of weight to be removed (checking for any silly answers). Lines 170 to 180 calculate the results of such a weight loss. Line 170 calculates the resulting weight. Line 180 sees how far you'll get with that weight.

Lines 190 to 220 print the results, and lines 230 to 250 give you the chance to try until you get it right.

Just for fun, you can change the amount of fuel (the 3400 in the *data* statement) and see how the results change.

RED ALERT

Your code name is Orion, and you're about to take a trip through time.



A mad scientist has gone back in time—carrying a nuclear bomb. As the computer whiz on the ACT (Adventure Connection Team) you must follow him into the past before he destroys the future!

You must use your micro to:

- guide your machine away from a rampaging Tyrannosaurus
- track a killer
- play a guessing game against a computer-controlled force field

***Time Trap* is more than a great adventure story. It's danger, action, suspense—plus computer programs for you to run.**

The programs will run in BASIC on the IBM PC, PCjr., APPLE II+, IIe, COMMODORE 64, VIC-20, TI 99/4A, ATARI 400/800, RADIO SHACK TRS-80 (Level 2 or greater), and RADIO SHACK COLOR COMPUTER.

Includes a reference manual with user tips and explanations of the programs!



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